

中国蔷薇科植物分类之研究(一)*

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作者等在整理我国近数十年来采集的大量蔷薇科植物标本时,发现有若干种或变种尚未定名与描写,有若干属尚未进行系统分类与制定属以下的各级分类组系名称。本篇共记绣线菊亚科和梨亚科 2 亚科 8 属的新种 26, 新变种 23 和新组系名称共 28。以下系中文摘要和拉丁文记载,全部中文记载将在中国植物志第三十六卷发表,不再重述,以省篇幅。

一、绣线菊属 *Spiraea* L.

本属拟分为 4 组 10 系,各组系的特征及其我国产的种类列举如下:

I. 圆锥花序组 Sect. *Spiraea* 花序为长圆形或金字塔形的圆锥花序,着生在当年生具叶长枝的顶端;花瓣粉红色或白色。模式种为(1)绣线菊 *S. salicifolia* L., 中国仅有此一种。

II. 复繖房花序组 Sect. II. *Calospira* K. Koch 花序为宽广平顶的复繖房花序,着生在当年生具叶长枝的顶端,极少自去年生的枝上发出;花白色、粉红色或紫色。本组分为以下 4 系:

1. 粉花系 Ser. *Japonicae* Yü 冬芽具数个鳞片;叶边多锯齿;雄蕊长于花瓣。本系有 5 种:(2)粉花绣线菊 *S. japonica* L. f. (系模式种), (3)台湾绣线菊 *S. formosana* Hayata, (4)紫花绣线菊 *S. purpurea* Hand.-Mazz., (5)华北绣线菊 *S. fritschiana* Schneid., (6)宫部绣线菊 *S. miyabei* Koidz.。

2. 翠蓝茶系 Ser. 2. *Henryanae* Yü 冬芽具数个鳞片;叶边全缘或在中部以上有少数锯齿;雄蕊稍长于花瓣或与花瓣近等长。本系有 7 种:(7)川滇绣线菊 *S. schneideriana* Rehd., (8)陕西绣线菊 *S. wilsonii* Duthie, (9)椭圆叶绣线菊 *S. ovalis* Rehd., (10)鄂西绣线菊 *S. veitchii* Hemsl., (11)翠蓝绣线菊 *S. henryi* Hemsl. (系模式种), (12)滇中绣线菊 *S. schochiana* Rehd., (13)茂汶绣线菊 *S. sargentiana* Rehd.。

3. 长芽系 Ser. *Longigemmatæ* Yü 冬芽具 2 个鳞片;叶片有锯齿或缺刻;雄蕊长于花瓣。本系有 5 种:(14)伏毛绣线菊 *S. teniana* Rehd., (15)新高山绣线菊 *S. morrisonicola* Hayata, (16)长芽绣线菊 *S. longigemmis* Maxim. (系模式种), (17)绒毛绣线菊 *S. velutina* Franch., (18)南川绣线菊 *S. rosthornii* Pritz.。

4. 楔叶系 Ser. *Canescentes* Yü 冬芽具 2 个鳞片;叶边多全缘;雄蕊与花瓣等长或稍长于花瓣。本系有 3 种:(19)楔叶绣线菊 *S. canescens* D. Don (系模式种), (20)毛

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果綉綉菊 *S. trichocarpa* Nakai, (21) 烏拉綉綉菊 *S. uratensis* Franch.。

III. 长繖花序組 Sect. *Chamaedryon* Ser. 花序为有柄的繖形或繖形总状，自去年生的枝上发出。本組分为以下 4 系：

5. 三裂系 Ser. 5. *Trilobatae* Pojark. emend. Yü 冬芽具数个鱗片；叶边有锯齿；雄蕊短于花瓣，稀长于花瓣。本系有 16 种：(22) 麻叶綉綉菊 *S. cantoniensis* Lour., (23) 菱叶綉綉菊 *S. vanhouttei* (Briot) Zabel, (24) 三裂綉綉菊 *S. trilobata* L. (系模式种)，(25) 綉球綉綉菊 *S. blumei* G. Don, (26) 土庄綉綉菊 *S. pubescens* Turcz., (27) 干地綉綉菊 *S. siccanae* (W. W. Smith) Rehd., (28) 金州綉綉菊 *S. nishimurae* Kitag., (29) 疏毛綉綉菊 *S. hirsuta* (Hemsl.) Schneid., (30) 中华綉綉菊 *S. chinensis* Maxim., (31) 毛花綉綉菊 *S. dasyantha* Bge., (32) 云南綉綉菊 *S. yunnanensis* Franch., (33) 华西綉綉菊 *S. laeta* Rehd., (34) 乳突綉綉菊 *S. papillosa* Rehd., (35) 丽江綉綉菊 *S. lichiangensis* W. W. Smith, (36) 浅裂綉綉菊 *S. sublobata* Hand.-Mazz., (37) 美丽綉綉菊 *S. elegans* Pojark.。

6. 欧亚系 Ser. *Mediae* Pojark. emend. Yü 冬芽具数个鱗片；叶边多全緣或有少数锯齿；雄蕊长于花瓣，稀等长或稍短。本系有 7 种：(38) 高山綉綉菊 *S. alpina* Pall., (39) 細枝綉綉菊 *S. myrtilloides* Rehd., (40) 窄叶綉綉菊 *S. dahurica* Maxim., (41) 欧亚綉綉菊 *S. media* Schmidt (系模式种)，(42) 絹毛綉綉菊 *S. sericea* Turcz., (43) 平臥綉綉菊 *S. prostrata* Maxim., (44) 大罗口綉綉菊 *S. tarokoensis* Hayata。

7. 石蚕叶系 Ser. *Chamaedryfolia* Pojark. 冬芽具 2 个外露鱗片；叶边有锯齿；雄蕊长于花瓣。本系有 2 种：(45) 曲萼綉綉菊 *S. flexuosa* Cambess., (46) 石蚕叶綉綉菊 *S. chamaedryfolia* L.。

8. 尖芽系 Ser. *Gemmatae* Yü 冬芽具 2 个外露鱗片；叶边全緣；雄蕊与花瓣等长。本系有 2 种：(47) 蒙古綉綉菊 *S. mongolica* Maxim. (系模式种)，(48) 毛叶綉綉菊 *S. mollifolia* Rehd.。

IV. 短繖花序組 Sect. *Glomerati* Nakai 花序为无梗的繖形花序，自去年生的枝上发出。

9. 李叶系 Ser. *Prunifoliae* Yü 冬芽具数个鱗片；叶边有锯齿或缺刻；雄蕊短于花瓣。本系有 4 种：(49) 李叶綉綉菊 *S. prunifolia* Sieb. & Zucc. (系模式种)，(50) 珍珠綉綉菊 *S. thunbergii* Blume, (51) 广西綉綉菊 *S. kwangsiensis* Yü, (52) 毛枝綉綉菊 *S. martini* Lévl.。

10. 全緣系 Ser. *Hypericifoliae* Pojark. 冬芽具数个鱗片；叶边全緣或稀有少数锯齿；雄蕊与花瓣等长或近等长。本系有 5 种：(53) 石灰岩綉綉菊 *S. calcicola* W. W. Smith, (54) 金絲桃叶綉綉菊 *S. hypericifolia* L., (55) 海拉尔綉綉菊 *S. chailarensis* Liou, (56) 粉叶綉綉菊 *S. compsohylla* Hand.-Mazz., (57) 耬斗叶綉綉菊 *S. aquilegifolia* Pall.。

綉綉菊属新种和新变种

1b. 綉綉菊貧齿变种 *S. salicifolia* L. var. *oligodonta* Yü 新变种

与模式种的异点在其叶片近全缘或先端有少数锯齿,叶边有稀疏睫毛。

内蒙: 呼纳盟,王光正 2124 (模式)。

2b. 粉花綉綫菊急尖叶变种 *S. japonica* L. f. var. *acuta* Yü 新变种

与模式种的区别在其叶片椭圆形或宽卵形,先端急尖,基部宽楔形至圆形,叶边有重锯齿。

云南: 大理,苍山,秦仁昌 22963 (模式); 洱源,罗平山,秦仁昌 23134。

2c. 粉花綉綫菊裂叶变种 *S. japonica* L. f. var. *incisa* Yü 新变种

与模式种的区别在其叶片为卵圆长圆形或长圆披针形,先端渐尖,基部宽楔形至圆形,叶边具浅羽状裂,裂片有重锯齿。

云南: 维西,碧罗雪山,王启无 63881 (模式), 蔡希陶 57420, 58586。

11b. 翠蓝綉綫菊峨眉变种 *S. henryi* Hemsl. var. *omeiensis* (Fang) Yü 新变种

与模式种的区别在其花序较大,直径 5—7 厘米,无毛;叶片下面被稀疏柔毛或近于无毛。

四川: 峨眉山,熊济华等 31400 (模式), 31251, 陶玉辉 50323, 51593。

22b. 麻叶綉綫菊毛萼变种 *S. cantoniensis* Lour. var. *pilosa* Yü 新变种

与模式种的区别在其花萼外被密毛,花梗和总花梗均被稀疏柔毛。

湖南: 慈利,朱国兴 7 (模式)。

24b. 三裂綉綫菊毛叶变种 *S. trilobata* L. var. *pubescens* Yü 新变种

与模式种的区别在其叶片和花朵均较小;叶片下面、花梗和花萼外面被稀疏柔毛。

内蒙: 卓资山,梁山,崔友文 1070a (模式)。

山西: 绵山,唐进 845。

30b. 中华綉綫菊大花变种 *S. chinensis* Maxim. var. *grandiflora* Yü 新变种

与模式种的区别在其花朵特大,直径 8—10 毫米;花瓣近圆形;雄蕊 22—30。

湖北: 鹤峰,彭辅松 238 (模式)。

34b. 乳突綉綫菊云南变种 *S. papillosa* Rehd. var. *yunnanensis* Yü 新变种

与模式种的区别在其小枝和花梗均具短柔毛;雄蕊长于或短于花瓣;萼果在腹缝上有稀疏柔毛。

云南: 鹤庆,马耳山,秦仁昌 23967 (模式)。

四川: 木里,俞德浚 5509。

47b. 蒙古綉綫菊毛枝变种 *S. mongolica* Maxim. var. *tomentulosa* Yü 新变种

与模式种区别在其小枝、叶柄和冬芽均密被细绒毛。

内蒙古: 阿拉善,夏緯瑛 3893 (模式), 3924。

51. 广西綉綫菊 *S. kwangsiensis* Yü 新种 图版二十六, 1

本种与粉叶綉綫菊 *S. compsophylla* Hand.-Mazz. 相近,但其异点在于本种的叶片为倒卵形、椭圆形或近圆形,全缘或有波状锯齿;花瓣长约萼片的 2 倍;雄蕊短于花瓣。与毛枝綉綫菊 *S. martini* Lévl. 的异点,在其小枝和叶片均近于无毛。

广西: 罗城,秦仁昌 5335 (模式); 阳朔,佛山,单人驊 769。

52c. 毛枝綉綫菊绒毛叶变种 *S. martini* Lévl. var. *tomentosa* Yü 新变种

与模式种的区别在其小枝和叶片均密被黄色绒毛。

云南：建水，蔡希陶 53033（模式）。

52b. 毛枝绣线菊长梗变种 *S. martini* Lévl. var. *pubescens* Yü 新变种
与模式种的区别在其花梗较长，8—15 毫米，外被短柔毛；萼果也具柔毛。

云南：富宁，王启无 88321（模式）。

二、栒子属 *Cotoneaster* B. Ehrb.

本属按照花序、花瓣、叶形及果实的特点，拟分为 3 组 7 系如下：

I. 密花组 Sect. *Densiflos* Yü 密集的复聚繖花序，花多数在 20 朵以上；叶片常大型，先端渐尖或急尖，稀圆钝。组模式种：柳叶栒子 *C. salicifolius* Franch.。

1. 柳叶系 Ser. *Salicifolii* Yü 常绿或半常绿灌木；叶片革质，下面具绒毛；花瓣白色，开花时平铺；果实红色，小核 2—3，稀 4。本系有 5 种：（1）柳叶栒子 *C. salicifolius* Franch.（系模式种），（2）麻叶栒子 *C. rhytidophyllus* Rehd. & Wils.，（3）蒙自栒子 *C. harrovianus* Wils.，（4）厚叶栒子 *C. coriaceus* Franch.，（5）陀螺果栒子 *C. turbinatus* Craib。

2. 耐寒系 Ser. *Frigidi* Yü 落叶稀半常绿灌木至小乔木；叶片革质，下面无毛或幼时被毛，老时脱落；花瓣白色，开花时平铺；果实红色，稀紫褐色至黑色，小核 2。本系有 4 种：（6）粉叶栒子 *C. glaucophyllus* Franch.，（7）光叶栒子 *C. glabratus* Rehd. & Wils.，（8）耐寒栒子 *C. frigidus* Lindl.（系模式种），（9）类似栒子 *C. affinis* Lindl.。

II. 疏花组 Sect. *Cotoneaster* 稀疏的聚繖花序常有花 3—15 朵，极稀到 20 朵；叶片常中型，先端急尖、渐尖或圆钝。

3. 多花系 Ser. *Multiflori* Pojark. emend. Yü 落叶稀半常绿灌木；叶片革质，下面无毛或有绒毛；花瓣白色，在开花时平铺展开；果实红色，小核 1—2。本系有 7 种：（10）水栒子 *C. multiflorus* Bge.，（11）毛叶水栒子 *C. submultiflorus* Popov，（12）蒙古栒子 *C. mongolicus* Pojark.，（13）钝叶栒子 *C. hebeophyllus* Diels，（14）准噶尔栒子 *C. soongaricus* (Regel & Herd.) Popov，（15）湖北栒子 *C. hupehensis* Rehd. & Wils.，（16）毡毛栒子 *C. pannosus* Franch.。

4. 尖叶系 Ser. *Acuminati* Yü 落叶灌木；叶片革质，下面无毛或具稀疏柔毛；花瓣粉红色，开花时直立；果实红色或黑色，小核 1—3，稀 4—5。本系有 7 种：（17）尖叶栒子 *C. acuminatus* Lindl.（系模式种），（18）亮叶栒子 *C. nitidifolius* Marq.，（19）泡叶栒子 *C. bullatus* Bois，（20）木坪栒子 *C. moupinensis* Franch.，（21）麻核栒子 *C. foveolatus* Turcz.，（22）灰栒子 *C. acutifolius* Turcz.，（23）川康栒子 *C. ambiguus* Rehd. & Wils.。

5. 全缘系 Ser. *Integerrimi* Pojark. emend. Yü 落叶至半常绿灌木；叶片革质至近革质，下面密被绒毛或短柔毛；花瓣红色，开花时直立；果实红色，稀黑色，小核 2—3，稀 4—5。本系有 13 种：（24）全缘栒子 *C. integerrimus* Medic.，（25）细枝栒子 *C. gracilis* Rehd. & Wils.，（26）华中栒子 *C. silvestrii* Pamp.，（27）西北栒子 *C. zabeli* Schneid.，（28）恩施栒子 *C. fangianus* Yü，（29）细梗栒子 *C. tenuipes* Rehd. & Wils.，（30）木帚栒子 *C. dielsianus* Pritz.，（31）球花栒子 *C. glomerulatus* W. W. Smith，（32）西南栒子

C. francheti Bois, (33) 白毛栒子 *C. wardii* W. W. Smith, (34) 暗红栒子 *C. obscurus* Rehd. & Wils., (35) 网脉栒子 *C. reticulatus* Rehd. & Wils., (36) 黑果栒子 *C. melano-carpus* Lodd.

III. 单花组 Sect. *Uniflos* Yü 花常单生, 稀 2—5 朵簇生; 叶片多小型, 先端圆钝或急尖。组模式种: 平枝栒子 *C. horizontalis* Dcne.

6. 小叶系 Ser. *Microphylli* Yü 平铺或矮生常绿灌木; 叶片革质; 花瓣白色, 在开花时平铺展开; 果实红色, 小核 2—3, 稀 4—5。本系有 5 种: (37) 矮生栒子 *C. dammeri* Schneid. (38) 台湾栒子 *C. morrisonensis* Hayata, (39) 小叶栒子 *C. microphyllus* Lindl. (系模式种), (40) 圆叶栒子 *C. rotundifolius* Lindl., (41) 黄杨叶栒子 *C. buxifolius* Lindl.

7. 两列系 Ser. *Distichi* Yü 平铺或矮生落叶或半常绿灌木; 叶片革质; 花瓣红色, 在开花时直立; 果实红色, 稀紫黑色, 小核 2—3, 稀 1 或 4。本系有 14 种: (42) 两列枝栒子 *C. nitidus* Jacq. (系模式种), (43) 藏南栒子 *C. taylorii* Yü, (44) 疣枝栒子 *C. verruculosus* Diels, (45) 细尖栒子 *C. apiculatus* Rehd. & Wils., (46) 血色栒子 *C. sanguineus* Yü, (47) 匍匐栒子 *C. adpressus* Bois, (48) 高山栒子 *C. subadpressus* Yü, (49) 平枝栒子 *C. horizontalis* Dcne., (50) 散生栒子 *C. divaricatus* Rehd. & Wils., (51) 镇康栒子 *C. chengkangensis* Yü, (52) 光泽栒子 *C. nitens* Rehd. & Wils., (53) 丹巴栒子 *C. harrismithii* Flink & Hylmö, (54) 单花栒子 *C. uniflorus* Bge., (55) 红花栒子 *C. rubens* W. W. Smith.

栒子属新种和新变种

1b. 柳叶栒子狭叶变种 *C. salicifolius* Franch. var. *angustus* Yü 新变种

与模式种区别在于叶片革质, 线状披针形, 叶边外卷, 上面显著皱缩, 侧脉 10—14 对, 下陷, 下面密被黄色绒毛; 果实倒卵球形, 直径 3—4 毫米, 多为 2 核。

四川: 峨眉山, 杜大华 852 (模式), 杨光辉 55426。

10b. 水栒子紫果变种 *C. multiflorus* Bge. var. *atropurpureus* Yü 新变种

与模式种区别在于果实较小, 直径 5—6 毫米, 深紫色。

云南: 德钦, 阿敦子, 王启无 70235 (模式), 俞德浚 8377。

28. 恩施栒子 *C. fangianus* Yü 新种

本种近似西北栒子 *C. zabeli* Schneid. 与木帚栒子 *C. dielsianus* Pritz., 但叶片宽卵圆形, 先端圆钝, 稀急尖, 聚繖花序具花 10—15 朵; 果实具 3 小核, 可以区别。

湖北: 恩施, 方明渊 24314 (模式)。

48. 高山栒子 *C. subadpressus* Yü 新种

本种与匍匐栒子 *C. adpressus* Bois 为近缘种, 但叶片近圆形, 稀宽卵形, 叶边圆厚不呈波状起伏, 常有睫毛; 小枝和萼筒有稀疏柔毛或近于无毛; 果实卵球形, 直径 5—6 毫米, 具 2 小核, 与匍匐栒子有别。

云南: 中甸, 哈巴雪山, 俞德浚 11552 (模式); 丽江, 雪山, 王启无 21104。

四川: 西康, 木里, 俞德浚 5593。

51. 鎮康栒子 *C. chengkangensis* Yü 新种 图版二十六, 2

本种与两列栒子 *C. nitidus* Jacq. 相近似, 但聚繖花序有花 2—3 朵; 萼筒微具柔毛; 果实具 3 (—5) 小核, 可以区分。又可与匍匐栒子 *C. adpressus* Bois 比較, 本种直立多分枝; 叶片两面有稀疏长柔毛; 雄蕊 20; 果实具 3 (—5) 小核, 易于識別。

云南: 鎮康, 俞德浚 16959 (模式); 維西, 白馬落, 馮国楮 4354。

55b. 紅花栒子小叶变种 *C. rubens* W. W. Smith var. *minimus* Yü 新变种

与模式种区别在于叶片較小, 长 8—10 毫米, 寬 6—8 毫米, 先端圓鈍或具短尖; 果实較小, 多为 3 核。

四川: 西康, 瓦斯沟, 曲桂齡 7919 (模式); 理县, 何鑄等 14091, 46779。

三、火棘属 *Pyracantha* Roem.瀾滄火棘 *P. mekongensis* Yü 新种

本种与火棘 *P. fortuneana* (Maxim.) Li 近似, 但本种为无刺矮生灌木; 叶片丛生在短枝頂端; 花序密集, 花梗短粗, 萼筒外被紅褐色絨毛, 易与火棘区别。

云南: 瀾滄, 王启无 76704 (模式)。

密花火棘 *P. densiflora* Yü 新种

本种与火棘 *P. fortuneana* (Maxim.) Li 比較, 区别在于本种的花梗、总花梗和萼筒均密被锈色絨毛。与瀾滄火棘比較, 本种为多刺灌木; 叶片倒卵形, 先端圓鈍, 叶柄較短, 近于无柄, 是其特点。

广西: 隆林, 梁畴芬、吴德邻 32567 (模式)。

四、花楸属 *Sorbus* L.

本属根据叶片种类、子房位置、心皮数目、果实上萼片宿存和脫落等情况, 分为 3 組 14 系, 各組系特征及其在我国产的种类分述如下:

I. 冠萼組 Sect. *Aria* Pers. 单叶有鋸齿或浅裂; 花柱 2—3, 稀 4, 基部常合生; 果实具宿存萼片。本組分 2 系:

1. 大果系 Ser. *Megalocarpae* Yü 果实近球形, 3—4 室; 叶片两面无毛或仅在下面脉腋間具毛。本系有 2 种: (1) 大果花楸 *S. megalocarpa* Rehd. (系模式种), (2) 銳齿花楸 *S. arguta* Yü。

2. 康藏系 Ser. *Thibeticae* Yü 果实球形、卵球形或橢圓形, 2—3 室; 叶片下面密被絨毛。本系有 5 种: (3) 长果花楸 *S. zahlbruckneri* Schneid., (4) 康藏花楸 *S. thibetica* (Card.) Hand.-Mazz. (系模式种), (5) 黄脉花楸 *S. xanthoneura* Rehd., (6) 灰叶花楸 *S. pallescens* Rehd., (7) 冠萼花楸 *S. coronata* (Card.) Yü & Tsai。

II. 落萼組 Sect. *Micromeles* (Dcne.) Rehd. 单叶有鋸齿或浅裂; 花柱 2—3, 稀 4—5, 基部合生; 果实时萼片脫落。本組分 4 系:

3. 直脉系 Ser. *Alnifoliae* Yü 叶片两面无毛或下面脉腋間有毛, 叶脉直达叶边齿端; 果实近球形或橢圓形。本系有 4 种: (8) 水榆花楸 *S. alnifolia* (Sieb. & Zucc.) K. Koch (系模式种), (9) 美脉花楸 *S. caloneura* (Stapf) Rehd., (10) 鼠李叶花楸 *S. rham-*

noides (Dcne.) Rehd., (11) 泡吹叶花楸 *S. meliosmifolia* Rehd.。

4. 曲脉系 Ser. *Thomsonianae* Yü 叶片两面无毛或下面脉腋間具毛, 叶脉在叶边微曲结合成网状; 果实球形或卵球形。本系有 5 种: (12) 疣果花楸 *S. granulosa* (Bertol.) Rehd., (13) 圆果花楸 *S. globosa* Yü & Tsai, (14) 滇緬花楸 *S. thomsonii* (King) Rehd. (系模式种), (15) 毛背花楸 *S. aronioides* Rehd., (16) 凱旋花楸 *S. keissleri* (Schneid.) Rehd.。

5. 白毛系 Ser. *Folgnierianae* Yü 叶片下面密被白色絨毛, 叶脉直达叶边齿端; 果实椭圆形或近球形。本系有 2 种: (17) 石灰花楸 *S. folgnieri* (Schneid.) Rehd. (系模式种), (18) 江南花楸 *S. hemsleyi* (Schneid.) Rehd.。

6. 褐毛系 Ser. *Ferrugineae* Yü 叶片下面密被锈褐色絨毛, 叶脉在叶边微曲, 结合成网状, 或直达叶边齿端; 果实近球形或卵球形。本系有 4 种: (19) 褐毛花楸 *S. rubiginosa* Yü, (20) 多变花楸 *S. astateria* (Card.) Hand.-Mazz., (21) 锈色花楸 *S. ferruginea* (Wenzig) Rehd. (系模式种), (22) 附生花楸 *S. epidendron* Hand.-Mazz.。

III. 复叶组 Sect. *Sorbus* 羽状复叶, 小叶片有锯齿, 稀全缘; 花柱 2—4, 稀 5, 常离生; 果实先端有萼片宿存。本组分 8 系:

7. 捲边系 Ser. *Insignes* Yü 冬芽无毛; 小叶片 3—6 对, 叶边反捲, 具波状細锯齿; 果实白色。本系有 3 种: (23) 巨叶花楸 *S. harrowiana* (Balf. f. & W. W. Smith) Rehd., (24) 捲边花楸 *S. insignis* (Hook. f.) Hedl. (系模式种), (25) 鈍齿花楸 *S. helenae* Koehne.。

8. 天山系 Ser. *Tianshanicae* Kom. 冬芽外被白色柔毛; 小叶片 5—7 对, 有锯齿; 花大型; 果实紅色。本系有 2 种: (26) 天山花楸 *S. tianshanica* Rupr., (27) 太白花楸 *S. tapashana* Schneid.。

9. 两色系 Ser. *Discolores* Yü 冬芽无毛或被稀疏柔毛; 小叶 (3—) 4—8 对, 有锯齿; 果实白色或紅色。本系有 6 种: (28) 湖北花楸 *S. hupehensis* Schneid., (29) 少齿花楸 *S. oligodonta* (Card.) Hand.-Mazz., (30) 华西花楸 *S. wilsoniana* Schneid., (31) 黄山花楸 *S. amabilis* Cheng, (32) 晚绣花楸 *S. sargentiana* Koehne, (33) 北京花楸 *S. discolor* (Maxim.) Maxim. (系模式种)。

10. 百华系 Ser. *Pohuashanensis* Yü 冬芽密被絨毛; 小叶 5—7 对, 有锯齿; 果实紅色。本系有 2 种: (34) 麻叶花楸 *S. esserteauiana* Koehne, (35) 花楸树 *S. pohuashanensis* (Hance) Hedl. (系模式种)。

11. 矮生系 Ser. *Reductae* Yü 矮生灌木; 冬芽被稀疏柔毛; 小叶 4—9 对, 有锯齿; 果实白色或粉色。本系有 2 种: (36) 鋪地花楸 *S. reducta* Diels (系模式种), (37) 侏儒花楸 *S. poteriifolia* Hand.-Mazz.。

12. 梯叶系 Ser. *Scalares* Yü 冬芽无毛; 小叶 7—14 对, 叶边全缘或仅先端有細锯齿; 果实紅色, 稀白色。本系有 6 种: (38) 宾川花楸 *S. obsoletidentata* (Card.) Yü, (39) 蕨叶花楸 *S. pteridophylla* Hand.-Mazz., (40) 尼泊尔花楸 *S. wallichii* (Hook. f.) Yü, (41) 侏江花楸 *S. kiukiangensis* Yü, (42) 梯叶花楸 *S. scalaris* Koehne (系模式种), (43) 球穗花楸 *S. glomerulata* Koehne.。

13. 西南系 Ser. *Rehderianae* Yü 冬芽常被褐色柔毛；小叶 7—13 对，有尖锐锯齿；果实红色或白色。本系有 6 种：(44) 西南花楸 *S. rehderiana* Koehne (系模式种)，(45) 台湾花楸 *S. randaiensis* (Hayata) Koidz., (46) 川滇花楸 *S. vilmorini* Schneid., (47) 维西花楸 *S. monbeigii* (Card.) Yü, (48) 陕甘花楸 *S. koehneana* Schneid., (49) 西康花楸 *S. prattii* Koehne。

14. 多对系 Ser. *Multijugae* Yü 冬芽无毛或被稀疏褐色柔毛；小叶 (8—) 12—21 对，有尖锐锯齿；果实紫红色或白色。本系有 4 种：(50) 纤细花楸 *S. filipes* Hand.-Mazz., (51) 红毛花楸 *S. rufopilosa* Schneid. (52) 四川花楸 *S. setschwanensis* (Schneid.) Koehne, (53) 多对花楸 *S. multijuga* Koehne (系模式种)。

花楸属新种和新变种

2. 锐齿花楸 *S. arguta* Yü 新种

本种近似大果花楸 *S. megalocarpa* Rehd., 但叶片长圆形或卵圆披针形，而非椭圆卵形，叶边有尖锐重锯齿，而非圆钝细锯齿；果实较小，直径 1—1.2 厘米，两种易于区分。

四川：屏山县，锦屏山，杜大华 5449 (模式)。

9b. 美脉花楸广东变种 *S. caloneura* (Stapf) Rehd. var. *kwangtungensis* Yü 新变种

与模式种区别在其叶柄较长，2—3 厘米，侧脉对数较少，8—10 对。

广东：乐昌，左景烈 21123 (模式)。

19. 褐毛花楸 *S. rubiginosa* Yü 新种

本种外形与疣果花楸 *S. granulosa* (Bertol.) Rehd. 近似，但小枝、叶片、叶柄、花梗和花萼均密被红褐色绒毛，果实较小，有少数疣点。

云南：镇康，王启无 72499、75374 (模式)；顺宁，俞德浚 16146、16272、16448、16478；龙陵，蔡希陶 55642、55668、55733；文山，蔡希陶 51816；蒙自，王启无 83202。

25b. 钝齿花楸锐齿变种 *S. helenae* Koehne var. *argutiserrata* Yü 新变种

与模式种的区别，在其叶片稍小，长 4.5—7 厘米，宽 2—4 厘米，叶边有尖锐锯齿或重锯齿。

四川：西康，丹巴，中国西部科学院 828 (模式)。

26b. 天山花楸全缘叶变种 *S. tianschanica* Rupr. var. *integrifoliata* Yü 新变种

与模式种的区别，在其小叶片较小，长 2.5—5 厘米，叶边全缘或中上部有 2—5 尖锐细锯齿。

新疆：八一农学院 5, 6 (模式)。

31. 黄山花楸 *S. amabilis* Cheng 新种

本种与华西花楸 *S. wilsoniana* Schneid. 为近缘种，但小枝、叶轴和小叶片下面中肋被褐色柔毛，小叶片下半部具尖锐锯齿，是其异点。

安徽：黄山，陈謨 1240，裴鑑 4033 (模式)。

41. 侏江花楸 *S. kiukiangensis* Yü 新种 图版二十七，1

本种近似蕨叶花楸 *S. pteridophylla* Hand.-Mazz., 但本种的小叶片只有 7—9 对，而

非 9—14 对,长圆形或卵状长圆形,而非卵状线形或线状长圆形,托叶膜质而非草质,两种易于区别。

云南: 依江,卡拉木图,俞德浚 19710 (模式)。

西藏: 貢布,冬拉,那于, F. Ludlow 等 5782a。

41b. 依江花楸无毛变种 *S. kiukiangensis* Yü var. *glabrescens* Yü 新变种
与模式种的异点,在其小叶片先端急尖,两面近于无毛。

云南: 依江,布卡汪,俞德浚 20071 (模式)。

五、石楠属 *Photinia* Lindl.

石楠属拟分为 2 组 4 系如下:

I. 常绿石楠组 Sect. *Photinia* 叶片革质,常绿;花序复繖房状,花梗和总花梗不具疣点。

1. 齿叶系 Ser. *Serrulatae* Kuan 叶边有锯齿。本系有 22 种: (1) 石楠 *P. serrulata* Lindl. (系模式种), (2) 密花石楠 *P. franchetiana* Diels, (3) 毛瓣石楠 *P. lasiopetala* Hayata, (4) 贵州石楠 *P. bodinieri* Lévl., (5) 榉木石楠 *P. davidsoniae* Rehd. & Wils., (6) 光叶石楠 *P. glabra* (Thunb.) Maxim., (7) 狭叶石楠 *P. stenophylla* Hand.-Mazz., (8) 罗城石楠 *P. lochengensis* Yü, (9) 球花石楠 *P. glomerata* Rehd. & Wils., (10) 绵毛石楠 *P. lanuginosa* Yü, (11) 广西石楠 *P. kwangsiensis* Li, (12) 秦氏石楠 *P. chingiana* Hand.-Mazz., (13) 钟氏石楠 *P. chihsiniana* Kuan, (14) 安龙石楠 *P. anlungensis* Yü, (15) 椭圆叶石楠 *P. beckii* Schneid., (16) 倒卵叶石楠 *P. lasiogyna* (Franch.) Schneid., (17) 布丹石楠 *P. griffithii* Dcne., (18) 带叶石楠 *P. loriformis* W. W. Smith, (19) 刺叶石楠 *P. prionophylla* (Franch.) Schneid., (20) 小檗叶石楠 *P. berberidifolia* Rehd. & Wils., (21) 桃叶石楠 *P. prunifolia* (Hook. & Arn.) Lindl., (22) 饒平石楠 *P. raupingensis* Kuan。

2. 全缘系 Ser. *Integrifoliae* Kuan 叶边全缘或有波状浅齿,极稀有显明锯齿。本系有 7 种: (23) 全缘石楠 *P. integrifolia* Lindl. (系模式种), (24) 台东石楠 *P. ardisiifolia* Hayata, (25) 黄花石楠 *P. flavidiflora* W. W. Smith, (26) 瑞丽石楠 *P. sambusiflora* W. W. Smith, (27) 花莲港石楠 *P. daphniphylloides* Hayata, (28) 厚叶石楠 *P. crassifolia* Lévl., (29) 独山石楠 *P. tushanensis* Yü。

II. 落叶石楠组 Sect. *Pourthiaea* (Dcne.) Schneid. 叶片纸质,冬季凋落;花序聚繖状、圆锥状、繖形总状或复繖房状;花梗和总花梗在果期常具显明疣点。

3. 多花系 Ser. *Multiflorae* Kuan 花序具多花,成繖房状、圆锥状或复繖房状。本系有 16 种: (30) 中华石楠 *P. beauverdiana* Schneid. (系模式种), (31) 台湾石楠 *P. lucida* (Dcne.) Schneid., (32) 厚齿石楠 *P. callosa* Chun, (33) 福建石楠 *P. fokiensis* (Franch.) Franch., (34) 蔡氏石楠 *P. tsaii* Rehd., (35) 湖北石楠 *P. bergerae* Schneid., (36) 小花石楠 *P. parviflora* Card., (37) 斜脉石楠 *P. obliqua* Stapf, (38) 陷脉石楠 *P. impressivena* Hayata, (39) 短叶石楠 *P. blinii* (Lévl.) Rehd., (40) 闽粤石楠 *P. benthamiana* Hance, (41) 绒毛石楠 *P. schneideriana* Rehd. & Wils., (42) 披针叶石楠 *P. lancifolia*

Rehd. & Wils., (43) 罗汉松叶石楠 *P. podocarpifolia* Yü, (44) 滇緬石楠 *P. hookeri* (Dcne.) Merr., (45) 毛果石楠 *P. pilosicalyx* Yü。

4. 少花系 Ser. *Pauciflorae* Kuan 花序有花 6—10 朵，成繖形总状，繖房状或聚繖状。本系有 3 种：(46) 小叶石楠 *P. parvifolia* (Pritz.) Schneid. (系模式种)，(47) 毛叶石楠 *P. villosa* (Thunb.) DC., (48) 褐毛石楠 *P. hirsuta* Hand.-Mazz.。

石楠属新种与新变种

8. 罗城石楠 *P. lochengensis* Yü 新种

本种近似狭叶石楠 *P. stenophylla* Hand.-Mazz., 但叶片倒披针形，叶边有波状细锯齿，侧脉 9—13 对；果实稍小，直径约 3 毫米，可以区分。

广西：罗城，陈文 84410 (模式)，秦仁昌 5314。

9b. 球花石楠楔叶变种 *P. glomerata* Rehd. & Wils. var. *cuneata* Yü 新变种

与原种区别在其叶片为披针形或倒披针形，长 12—15 厘米，宽 3—5 厘米，基部楔形；叶柄长 1.5—2 厘米。

云南：永仁，蔡希陶 52879 (模式)。

9c. 球花石楠小叶变种 *P. glomerata* Rehd. & Wils. var. *microphylla* Yü 新变种

与原种区别在其叶片为长圆形或倒卵状长圆形，基部宽楔形；叶柄长 1—2 厘米。

云南：邓川，鸡山，秦仁昌 24894 (模式)。

10. 绵毛石楠 *P. lanuginosa* Yü 新种

本种近似球花石楠 *P. glomerata* Rehd. & Wils., 但叶边有尖锐锯齿，花梗和总花梗外被白色绵毛，萼筒及萼齿无毛，可以区别。

湖南：雪峰山，李泽棠 1882 (模式)。

13. 钟氏石楠 *P. chihsiniana* Kuan 新种

本种近似广西石楠 *P. kwangsiensis* Li, 但小枝、总花梗、花梗和花萼外面均被灰色绒毛；叶片稍窄小，先端急尖或短渐尖，基部向下延伸，叶柄短；果实稍小，可以区别。

广西：临桂，钟济新 808097 (模式)、808679、808829、808871，梁畴芬 31096；平乐，陈照宙 52327；桂林，曾怀德 27773、27992，邓志农 13423。

14. 安龙石楠 *P. anlungensis* Yü 新种

本种近似厚叶石楠 *P. crassifolia* Lévl., 但叶片具尖锐锯齿而非全缘，基部宽楔形，侧脉 30—34 对而非 15—17 对，叶柄稍长；花梗和花萼外面无毛，可以区别。

贵州：安龙，张志松、张永田 5359 (模式)。

21b. 桃叶石楠齿叶变种 *P. prunifolia* (Hook. & Arn.) Lindl. var. *denticulata* Yü 新变种

与模式种区别在其叶片长圆披针形，先端急尖，基部楔形，叶边有尖锐重锯齿，齿端具腺体；花梗和总花梗外被稀疏柔毛；萼筒无毛，易于区别。

浙江：平阳，章绍尧 5867 (模式)。

广西：兴安，广西队 920。

22. 饒平石楠 *P. raupingensis* Kuan 新种

本种近似桃叶石楠 *P. prunifolia* (Hook. & Arn.) Lindl., 但花序密被白色絨毛; 叶片基部楔形; 叶柄无腺体无锯齿, 可以区别。

东广: 饒平, 凤凰山, 陈念劬 42691 (模式); 增城, 曾怀德 20402; 从化, 曾怀德 25130。

广西: 十万大山, 秦仁昌 8361。

23b. 全缘石楠云南变种 *P. integrifolia* Lindl. var. *yunnanensis* Yü 新变种

与模式种异点在其叶片为披针形或倒披针形, 先端渐尖, 花梗和总花梗微被柔毛。

云南: 貢山, 馮国楣 8153 (模式); 維西, 馮国楣 4167。

29. 独山石楠 *P. tushanensis* Yü 新种

本种近似厚叶石楠 *P. crassifolia* Lévl., 但叶片较大; 萼筒呈长筒状, 外面密被灰色柔毛, 是其特点。

贵州: 独山, 荔波队 1296 (模式)。

32. 厚齿石楠 *P. callosa* Chun 新种

本种近似福建石楠 *P. fukienensis* (Franch.) Franch., 但叶片有浅锐锯齿, 齿端厚硬; 花朵较小, 花梗和萼片均较短, 可以区别。又可与中华石楠 *P. beauverdiana* Schneid. 比较, 本种叶片稍厚, 披针形或长圆披针形, 下面无毛, 锯齿厚硬; 果实较小, 也易于区别。

广东: 信宜, 黄志 31607、32130 (模式), 32255, 高锡朋 51361; 防城, 合浦区调查队 2371。

广西: 十万大山, 秦仁昌 8373; 百寿, 譚英华 25; 大明山, 蔡灿星 5335; 上思, 曾怀德 22441、24222; 龙胜, 龙胜队 157。

43. 罗汉松叶石楠 *P. podocarpifolia* Yü 新种

本种近似披针叶石楠 *P. lancifolia* Rehd. & Wils., 但叶边近全缘或有浅钝锯齿, 叶柄短, 长 2—5 毫米; 花朵较小, 直径 5—8 毫米。又可与狭叶石楠 *P. stenophylla* Hand.-Mazz. 比较, 本种小枝和叶片下面密被灰色絨毛, 可以区别。

贵州: 罗甸, 红水河, 黔南队 408 (模式) 709。

广西: 天峨, 张志松、张永田 14; 黄志 43389; 隆林, 梁畴芬、吴德邻 32325; 田林, 张肇鸾 10921; 百色, 百色队 1534。

45. 毛果石楠 *P. pilosicalyx* Yü 新种

本种近似中华石楠 *P. beauverdiana* Schneid. 和絨毛石楠 *P. schneideriana* Rehd. & Wils., 但叶片常呈披针形, 花梗、总花梗和花萼外被黄色柔毛, 易与前两种区别。

贵州: 安龙, 龙山, 张志松、张永田 4035 (模式)。

48b. 褐毛石楠裂叶变种 *P. hirsuta* Hand.-Mazz. var. *lobulata* Yü 新变种

与模式种区别在其叶片先端尾尖有 3 裂片, 易于区别。

福建: 連城, 林鐸 4167 (模式)。

六、枇杷属 *Eriobotrya* Lindl.

枇 杷 属 新 种

麻栗坡枇杷 *E. malipoensis* Kuan 新种

本种与枇杷 *E. japonica* (Thunb.) Lindl. 相似, 但叶片下面、叶柄及花序均密被锈褐

色絨毛；叶片长圓形或长卵圓形，有側脉 20—25 对，是其特点。

云南：麻栗坡，王启无 86318（模式）、83170，馮国楹 13123。

七、梨属 *Pyrus* L.

河北梨 *P. hopeiensis* Yü 新种

本种与秋子梨 *P. ussuriensis* Maxim. 和褐梨 *P. phaeocarpa* Rehd. 相近似，但与秋子梨的异点在其果实为黑褐色而有斑点，与褐梨的异点为叶边有带芒状細锯齿，果实上萼片宿存。从形态特征分析可能为秋子梨与褐梨的天然杂交种。

河北：昌黎，杏树园，张福寿 268（模式），238，269，276。

新疆梨 *P. sinkiangensis* Yü 新种

本种近似西洋梨 *P. communis* L.，但其花梗較长，叶边具尖銳細锯齿，易于区别。从形态上分析可能为西洋梨与中国白梨 *P. bretschneideri* Rehd. 的杂交种。

新疆：輪台，新疆队 17（模式）；鄯善，魯克沁，新疆队 27、46、47。

甘肃：皋兰，夏緯瑛 4811、4822。

杏叶梨 *P. armeniacaefolia* Yü 新种 图版二十七，2

本种近似木梨 *P. xerophilae* Yü，但叶片近圓形或寬卵形，叶边有波状鈍锯齿；果实扁圓形，易于識別。

新疆：塔城，新疆队 29（模式）。

滇梨 *P. pseudopashia* Yü 新种

本种近似川梨 *P. pashia* D. Don，但叶片先端圓鈍或急尖；花序被稀疏綿毛，花朵稍小；果实上有萼片宿存，易于識別。

云南：兰坪，蔡希陶 56143（模式）；鶴庆，松桂，秦仁昌 23741；維西，王启无 63727，馮国楹 20923。

貴州：独山，蔣英 6629。

木梨 *P. xerophila* Yü 新种

本种近似麻梨 *P. serrulata* Rehd.，但叶片較小，叶边有波状細鈍锯齿；花序被稀疏柔毛；果实較小，有宿萼，4—5 室，易于区分。

甘肃：榆中，兴隆山，俞德浚 112（模式）；天水，白楊林，刘繼孟 10246、10516，夏緯瑛 5295。

陕西：佛坪，傅坤俊 4683；武功栽培，俞德浚 14。

山西：沁县，牛槽沟，关克俭等 462。

豆梨全緣叶变种 *P. calleryana* Dcne. var. *integrifolia* Yü 新变种

与模式种区别在于叶片卵圓形，叶边全緣，基部近圓形。

浙江：梅溪，郑万鈞 4936（模式）；天目山，唐进等 468；莫干山，刘慎諤 6869。

八、木瓜属 *Chaenomeles* Lindl.

西藏木瓜 *C. thibetica* Yü 新种

本种近似貼梗木瓜 *C. lagenaria* (Loisel.) Koidz.，但叶边全緣，叶片下面密被锈色絨毛；花柱基部具柔毛，易于区分。从形态特征分析，本种可能为貼梗木瓜与移椴 *Docynia delavayi* (Franch.) Schneid. 的杂交种。

西藏：拉薩，罗布林卡，果园中，傅国助 663（模式）；林芝，东久，傅国助 207。

四川：小金，张秀实等 6832。

TAXA NOVA ROSACEARUM SINICARUM (I)

T. T. Yü & K. C. KUAN

(Institutum Botanicum Academiae Sinicae)

I. SPIRAEA L.

SYSTEMA SPIRAEAE SINICAE

Sect. I. *Spiraea*

Inflorescentia elongate cylindrico-paniculata in parte apicali rami annotini nascens; petala rosea vel alba. Typus sectionis: *S. salicifolia* L.

Specie unica in Sina dispersa: 1. *S. salicifolia* L.

Sect. II. *Calospira* K. Koch

Inflorescentia corymboso-paniculata, in apice rami annotini etiam ramorum breviorum hornotinorum orta.

Ser. 1. *Japonicae* Yü, ser. nov.

Gemmae perulis pluribus imbricatis; folia serrata; stamina petalis longiora. Typus seriei: *S. japonica* L.f.

Speciebus 5: 2. *S. japonica* L.f., 3. *S. formosana* Hayata, 4. *S. purpurea* Hand.-Mazz., 5. *S. fritschiana* Schneid., 6. *S. miyabei* Koidz.

Ser. 2. *Henryanae* Yü, ser. nov.

Gemmae perulis pluribus imbricatis; folia integra vel remote serrata; stamina petalis paulo longiora vel subaequilonga. Typus seriei: *S. henryi* Hemsl.

Speciebus 7: 7. *S. schneideriana* Rehd., 8. *S. wilsonii* Duthie, 9. *S. ovalis* Rehd., 10. *S. veitchii* Hemsl., 11. *S. henryi* Hemsl., 12. *S. schochiana* Rehd., 13. *S. sargentiana* Rehd.

Ser. 3. *Longigemmatae* Yü, ser. nov.

Gemmae perulis duabus exterioribus valvatis; folia serrata vel incisa; stamina petalis longiora. Typus seriei: *S. longigemmis* Maxim.

Speciebus 5: 14. *S. teniana* Rehd., 15. *S. morrisonicola* Hayata, 16. *S. longigemmis* Maxim., 17. *S. velutina* Franch., 18. *S. rosthornii* Pritz.

Ser. 4. *Canescentes* Yü, ser. nov.

Gemmae perulis duabus exterioribus valvatis; folia integra; stamina petalis subaequilonga vel paulo longiora. Typus seriei: *S. canescens* D. Don.

Speciebus 3: 19. *S. canescens* D. Don, 20. *S. trichocarpa* Nakai, 21. *S. uratensis* Franch.

Sect. III. *Chamaedryon* Ser.

Inflorescentia umbellata vel umbellat-racemosa, in apice ramuli hornotini terminalis; petala alba.

Ser. 5. *Trilobatae* Pojark. emend. Yü

Gemmae perulis pluribus imbricatis; folia serrata; stamina petalis breviora vel subaequilonga.

Speciebus 16: 22. *S. cantoniensis* Lour., 23. *S. vanhouttei* (Briot) Zabel, 24. *S. trilobata* L., 25. *S. blumei* G. Don, 26. *S. pubescens* Turcz., 27. *S. siccanae* (W. W. Smith) Rehd., 28. *S. nishimurae* Kitag., 29. *S. hirsuta* (Hemsl.) Schneid., 30. *S. chinensis* Maxim., 31. *S. dasyantha* Bge., 32. *S. yunnanensis* Franch., 33. *S. laeta* Rehd., 34. *S. papillosa* Rehd., 35. *S. lichiangensis* W. W. Smith, 36. *S. sublobata* Hand.-Mazz., 37. *S. elegans* Pojark.

Ser. 6. **Mediae** Pojark. emend. Yü

Gemmae perulis pluribus imbricatis; folia integra vel pauci-serrata; stamina petalis longiora vel paulo breviora.

Speciebus 7: 38. *S. alpina* Pall., 39. *S. myrtilloides* Rehd., 40. *S. dahurica* Maxim., 41. *S. media* Schmidt, 42. *S. sericea* Turcz., 43. *S. prostrata* Maxim., 44. *S. tarokoensis* Hayata.

Ser. 7. **Chamaedryfoliae** Pojark.

Gemmae perulis duabus exterioribus valvatis; folia serrata; stamina petalis longiora.

Speciebus 2: 45. *S. flexuosa* Cambess., 46. *S. chamaedryfolia* L.

Ser. 8. **Gemmatae** Yü, ser. nov.

Gemmae perulis duabus exterioribus valvatis; folia saepe integra; stamina petalis subaequilonga. Typus seriei: *S. mongolica* Maxim.

Speciebus 2: 47. *S. mongolica* Maxim., 48. *S. mollifolia* Rehd.

Sect. IV. **Glomerati** Nakai

Inflorescentia glomerata e gemmis lateralibus rami annotini; petala alba.

Ser. 9. **Prunifoliae** Yü, ser. nov.

Gemmae perulis pluribus imbricatis; folia serrata vel incisa; stamina petalis breviora. Typus seriei: *S. prunifolia* Sieb. & Zucc.

Speciebus 4: 49. *S. prunifolia* Sieb. & Zucc., 50. *S. thunbergii* Blume, 51. *S. kwang-siensis* Yü, 52. *S. martini* Lévl.

Ser. 10. **Hypericifoliae** Pojark.

Gemmae perulis pluribus imbricatis; folia integra vel pauci-serrata.

Speciebus 5: 53. *S. calcicola* W. W. Smith, 54. *S. hypericifolia* L., 55. *S. chailarensis* Liou, 56. *S. compsohylla* Hand.-Mazz., 57. *S. aequilegifolia* Pall.

SPECIES ET VARIETATES NOVAE GENERIS SPIRAEA

1b. ***S. salicifolia*** L. var. ***oligodonta*** Yü, var. nov.

A typo recedit praecipue foliis integris vel ad apicem paulo serratis, margine sparse ciliatis.

Mongolia Interiora: Hona-mong, alt. 700 m., K. C. Wang 2124 (Typus in HM.*)

2b. ***S. japonica*** L. f. var. ***acuta*** Yü, var. nov.

A typus recedit foliis ellipticis vel late ovatis, apice acutis, basi late cuneatis vel rotundatis, 2.5—4.5 cm. longis, 1.8—2.5 cm. latis, margine sparse duplicato-serratis, subtus pubescentibus; inflorescentiis 2.5—4 cm. diam., floribus roseis.

Yunnan: Tali, Tsang-shan, in fruticetis, VI. 27, 1929, R. C. Ching 22963 (Typus in HP.**); Erh-yuan, Mt. Lo-ping, in pratis, VII. 5, 1929, R. C. Ching 23134.

* HM=Herb. Inst. Sylv.-Pedol. Acad. Sin. Mukden.

** HP=Herb. Inst. Bot. Acad. Sin. Pekin.

2c. *S. japonica* L. f. var. *incisa* Yü, var. nov.

A typo recedit foliis ovato-oblongis vel oblongo-lanceolatis, apice acuminatis, basi late cuneatis vel fere rotundatis, margine leviter pinnatim lobatis, lobis duplicato-serratis, 6—9 cm. longis, 3—4 cm. latis, subtus pubescentibus; inflorescentiis 5—7 cm. diam., floribus roseis.

Yunnan: Weihsi, Mt. Pe-lo, alt. 3500 m., margine silvae, VI. 1935, C. W. Wang 63881 (Typus in HP.); ibidem, H. T. Tsai 57420, 58586.

11b. *S. henryi* Hemsl. var. *omeiensis* (Fang) Yü, var. nov.

S. omeiensis Fang, sp. nov. ined.

A varietate prima inflorescentiis majoribus, 5—7 cm. diam. glabris, foliis subtus glabrescentibus vel sparse villosulis differt.

Szechuan: Mt. Omei, in silvis, VII. 1, 1952, C. H. Hsiung & S. S. Chang 31400 (Typus in HC*); ibidem, C. H. Hsiung & S. S. Chang 31251; ibidem, VIII. 1956, Y. H. Tao 50323, 51593.

22b. *S. cantoniensis* Lour. var. *pilosa* Yü, var. nov.

A typo recedit praecipue calyce extus dense piloso, pedicellis pedunculisque sparse pilosis.

Hunan: Tze-li, VI. 13, 1955, K. S. Chu 007 (Typus in HC.).

24b. *S. trilobata* L. var. *pubescens* Yü, var. nov.

A typo recedit foliis floribusque minoribus, foliis subtus et pedicellis ut calyce extus sparse pubescentibus.

Mongolia Interiora: Mt. Cho-tze, Liang-shan, IX. 19, 1949, Y. W. Tsui 1070a (Typus in HP.).

Shansi: Mian-shan, alt. 1520 m., V. 27, 1927, T. Tang 845.

30b. *S. chinensis* Maxim. var. *grandiflora* Yü, var. nov.

A typo recedit floribus majoribus, 8—10 mm. diam., petalis suborbicularibus, 4—5 mm. longis et latis, staminibus 22—30.

Hupeh: Ho-feng, F. S. Peng 238 (Typus in HW**).

34b. *S. papillosa* Rehd. var. *yunnanensis* Yü, var. nov.

A typo recedit ramulis pedicellisque pubescentibus, staminibus petalis longioribus vel brevioribus, folliculis ad suturas ventrales sparse pilosis.

Yunnan: Hochin, Mt. Ma-erh alt. 3300 m., in silvis mixtis, VIII. 23, 1929, R. C. Ching 23967 (Typus in HP.).

Szechuan: Muli, alt. 3450 m., in silvis abiegno-quercetis, V. 19, 1937, T. T. Yü 5509.

47b. *S. mongolica* Maxim. var. *tomentulosa* Yü, var. nov.

A typo recedit ramulis, petiolis et gemmis dense tomentulosis.

Mongolia Interiora: Mt. Ala, in rupibus siccis, alt. 1500—1700 m., VIII. 1933, W. Y. Hsia 3893 (Typus in HP.); ibidem, W. Y. Hsia 3924.

51. *S. kwangsiensis* Yü, sp. nov. Pl. XXVI, 1

Proxima *S. compsophyllae* Hand.-Mazz., a qua differt praesertim foliis ramulorum elongatorum obovatis crenato-serratis, petalis sepalis duplo longioribus, staminibus petalis brevioribus. *S. martini* Lévl. etiam affinis a qua ramulis foliisque glabrescentibus distat.

* HC=Herb. Inst. Bot. Austro-Sin. Acad. Sin. Canton.

** HW=Herb. Hort. Bot. Wuhan.

Frutex subdivaricatus, 0.5—1 m. altus; rami graciles, teretes, hornotini laxe puberuli, rubro-brunnei, annotini glabri cinereo-castanei, longitudinaliter fissi; gemmae ovoideae, parvae, pluri-perulatae, laxe puberulae. Folia variabilia, obovata, elliptica vel suborbiculata, majora 10—18 mm. longa et 8—14 mm. lata, minora 7—10 mm. longa et 4—5 mm. lata, obtusa, basi cuneata vel rotundata, apicem versus sparse crenato-serrata, subtrilobata, vel ramulorum floriferorum fere integra, utrinqua glabra supra laete luteo-viridia subtus pallide viridia vel glauca, reticulo nervorum paulo conspicuo, nervis utrinsecus 3—4; petioli graciles, purpurascens, glabri, 2—4 mm. longi. Racemi simplices umbelliformes, 3—8-flori, basi foliis fasciculatis parvis suffulti; pedicelli 5—9 mm. longi, glabri; pedunculi 2—10 mm. longi; bracteae parvae et breves, lineares; flores 5—7 mm. diam.; calycis tubus campanulatus, extus glaber, intus dense pubescens, dentibus triangularibus, acutis, extus glabris, intus sparse puberulis; petala late obovata, apice obtusa vel emarginata, alba, 2—3 mm. diam.; stamina circa 20, petalis dimidio breviora; discus annularis indistincte 10-lobatus; carpodia laxe pilosa; styli staminibus paulo breviores. Fructus calycis dentibus erectis; folliculi patentes, ad suturas ventrales pilosi, stylo dorso apicali leviter declinato vel suberecto.

Kwangsi: Lu-chen, Ta-lian-shan, alt. 600 m., in declivibus apud lapides calcarios, V. 25, 1928; R. C. Ching 5335 (Typus in HP.); Yang-so, Yao-shan, IV. 1938, Z. H. Shan 769.

52b. ***S. martini*** Lévl. var. ***pubescens*** Yü, var. nov.

A typo recedit pedicellis pubescentibus, 8—15 mm. longis, folliculis pilosis.

Yunnan: Foo-ning, in fruticetis, alt. 700 m., VI. 11, 1940, C. W. Wang 88321 (Typus in HP.).

52c. ***S. martini*** Lévl. var. ***tomentosa*** Yü, var. nov.

A typo recedit praecipue ramulis foliisque dense flavo-tomentosis.

Yunnan: Chien-shui, alt. 2000 m., VI. 2, 1933, H. T. Tsai 53033 (Typus in HP.).

II. COTONEASTER B. Ehrh.

SYSTEMA COTONEASTERI SINICAE

Sect. I. ***Densiflos*** Yü, sect. nov.

Inflorescentiae multiflorae, dense composito-cymosae; folia saepe magna, apice acuta vel acuminata rarius obtusa. Sectionis typus: *C. salicifolius* Franch.

Ser. 1. ***Salicifolii*** Yü, ser. nov.

Frutices sempervirentes vel semi-sempervirentes; folia coriacea, subtus tomentosa; petala alba, patentia; fructus rubri, pyrenae 2—3 rarius 4. Typus seriei: *C. salicifolius* Franch.

Speciebus 5: 1. *C. salicifolius* Franch., 2. *C. rhytidophyllus* Rehd. & Wils., 3. *C. harrovianus* Wils., 4. *C. coriaceus* Franch., 5. *C. turbinatus* Craib.

Ser. 2. ***Frigidi*** Yü

Frutices vel arbusculae deciduae vel semi-sempervirentes; folia herbacea, subtus glabra vel initio pilosa demum glabrescentia; petala alba, patentia; fructus rubri rarius purpureo-fusci vel nigri, pyrenae 2.

Speciebus 4: 6. *C. glaucophyllus* Franch., 7. *C. glabratus* Rehd. & Wils., 8. *C. frigidus* Wall., 9. *C. affinis* Lindl.

Sect. II. *Cotoneaster*

Inflorescentiae cymosae, 3—15-florae rarius multiflorae; folia saepe moderate magna, apice acuta, acuminata vel obtusa.

Ser. 3. *Multiflori* Pojark. emend. Yü

Frutices decidui rarius semi-sempervirentes; folia herbacea, subtus glabra vel tomentosa; petala alba, patentia; fructus rubri, pyrenae 1—2.

Speciebus 7: 10. *C. multiflorus* Bge., 11. *C. submultiflorus* Popov, 12. *C. mongolicus* Pojark., 13. *C. hebeophyllus* Diels, 14. *C. soongaricus* (Regel & Herd.) Popov, 15. *C. hupehensis* Rehd. & Wils., 16. *C. pannosus* Franch.

Ser. 4. *Acuminati* Yü

Frutices decidui; folia herbacea, subtus glabra vel sparse villosa; petala rosea, erecta; fructus rubri vel nigri, pyrenae 1—3 rarius 4—5.

Speciebus 7: 17. *C. acuminatus* Lindl., 18. *C. nitidifolius* Marq., 19. *C. bullatus* Bois, 20. *C. moupinensis* Franch., 21. *C. foveolatus* Turcz., 22. *C. acutifolius* Turcz., 23. *C. ambiguus* Rehd. & Wils.

Ser. 5. *Integerrimi* Pojark. emend. Yü

Frutices decidui vel semi-sempervirentes; folia herbacea vel coriacea subtus dense tomentosa vel pubescentia; petala rosea, erecta; fructus rubri rarius purpureo-nigri, pyrenae 2—3 rarius 4—5.

Speciebus 13: 24. *C. integerrimus* Medic., 25. *C. gracilis* Rehd. & Wils., 26. *C. silvestrii* Pamp., 27. *C. zabeli* Schneid., 28. *C. fangianus* Yü, 29. *C. tenuipes* Rehd. & Wils., 30. *C. dielsianus* Pritz., 31. *C. glomerulatus* W. W. Smith, 32. *C. francheti* Bois, 33. *C. wardii* W. W. Smith, 34. *C. obscurus* Rehd. & Wils., 35. *C. reticulatus* Rehd. & Wils., 36. *C. melanocarpus* Lodd.

Sect. III. *Uniflos* Yü, sect. nov.

Flores solitariae rarius 2—5-natae; folia saepe parva, apice obtusa vel acuta. Sectionis typus: *C. horizontalis* Dcne.

Ser. 6. *Microphylli* Yü

Frutices sempervirentes, prostrati vel humiles; folia coriacea; petala alba, patentia; fructus rubri, pyrenae 2—3 rarius 4—5.

Speciebus 5: 37. *C. dammeri* Schneid., 38. *C. morrisonensis* Hayata, 39. *C. microphyllus* Lindl., 40. *C. rotundifolius* Lindl., 41. *C. buxifolius* Lindl.

Ser. 7. *Distichi* Yü

Frutices decidui vel semi-sempervirentes; folia herbacea; petala rosea vel rubra, erecta; fructus rubri vel purpureo-nigri, pyrenae 2—3 rarius 1—4.

Speciebus 14: 42. *C. nitidus* Jacq., 43. *C. taylorii* Yü, 44. *C. verruculosus* Diels, 45. *C. apiculatus* Rehd. & Wils., 46. *C. sanguineus* Yü, 47. *C. adpressus* Bois, 48. *C. subadpressus* Yü, 49. *C. horizontalis* Dcne., 50. *C. divaricatus* Rehd. & Wils., 51. *C. chengkangensis* Yü, 52. *C. nitens* Rehd. & Wils., 53. *C. harrismithii* Flinck & Hylmö, 54. *C. uniflorus* Bge., 55. *C. rubens* W. W. Smith.

SPECIES ET VARIETATES NOVAE GENERIS COTONEASTERI B. Ehrh.

1b. *C. salicifolius* Franch. var. *angustus* Yü, var. nov.

A typo recedit foliis coriaceis, lineari-lanceolatis, margine revolutis, supra inter nervos utrinsecus 10—14 valde impressos, manifeste rugosis, subtus tomento flavescente dense obtectis; fructibus obovoideis, 3—4 mm. diam., plerumque 2-pyrenatis.

Szechuan: Mt. Omei, alt. 1500—1600 m., in silvis, IX. 15, 1935, T. H. Tu 852 (Typus in HP.); ibidem, VI. 19, 1957, K. H. Yang 55426.

10b. *C. multiflorus* Bge. var. *atropurpureus* Yü, var. nov.

A typo differt praecipue fructibus minoribus, 5—6 mm. diam., atro-purpureis.

Yunnan: Atun-tze, alt. 2700 m. in silvis vel fruticetis, IX. 1935, C. W. Wang 70235 (Typus in HP.); ibidem, V. 20, 1937, T. T. Yü 8377.

28. *C. fangianus* Yü, sp. nov.

Ex affinitate *C. zabeli* Schneid. et *C. dielsiani* Pritz., a quibus differt foliis late ovatis apice plerumque obtusis, corymbis multifloris, pyrenis 3.

Frutex 1—3-metralis, ramis divaricatis gracilibus curvatis; ramuli hornotini flavido-strigillosi, annotini glabri, fusco-rubri vel cinereo-brunnei. Folia decidua, late ovata vel suborbicularia, apice obtusa rarius acuta, basi rotundata, 1—2 cm. longa, 1—1.5 cm. lata, supra saturate viridia, glabra, utrinsecus nervis 3—5 ut costa leviter impressis, subtus dense flavido-tomentosa; petioli 2—3 mm. longi, dense flavido-pilosi; stipulae lineares, membranaceae, caducae. Cymae 10—15-florae, 2—2.5 cm. diam., ramulos laterales terminantes; pedicelli cum pedunculo 1.5—2.5 cm. longi, dense villosi; flores 4—5 mm. diam.; calycis tubus laxo villosus vel fere glaber, dentibus triangulari-ovatis obtusiusculis, rarius acutis, intus ciliatis; petala erecta, suborbicularia vel late obovata, apice emarginata vel obtusa, breviter unguiculata, 1—2 mm. longa lataque, rosea; stamina 20, petalis breviora; carpodia 3, apice villosa, petalis breviora vel aequilonga. Fructus immaturus ovalis; pyrenae 3.

Hupei: Enh-shih, in valle fluvii, alt. 1350 m. VI. 18, 1958, M. Y. Fang 24314 (Typus in HP.).

48. *C. subadpressus* Yü, sp. nov.

Species valde affinis *C. adpresso* Bois a quo differt foliis late ovatis vel ellipticis, tenuibus, margine undulatis, ramulis et calycum tubis glabrescentibus.

Frutex deciduus vel semi-sempervirens 10—15 cm. altus densissime ramosus, ramis prostratis et ubique radicantibus; ramuli hornotini dense puberuli, annotini glabrescentes cinereo-nigri. Folia coriacea, rigida, suborbicularia vel late ovata, apice obtusa vel acuta, basi late cuneata vel rotundata, 4—8 (—12) mm. longa et lata, supra laete viridia subtus pallidiora utrinque cum margine initio puberula mox glabrescentia; costa supra leviter impressa subtus elevata, nervis lateralibus obsoletis; petiolus 1—2 mm. longus, initio puberulus. Flores solitarii, 4—6 mm. diam. subsessiles vel breve pedicellati; calycis tubus campanulatus dentibus triangularibus acutis vel obtusis, extus sparse villosis, intus glabris vel apice tantum villosis; petala erecta, obovata vel suborbicularia, obtusa, breviter unguiculata, 3—4 mm. longa, 2—3 mm. lata, rosea; stamina 10—15; petalis breviora; carpodia 2, apice villosa, stylis staminibus brevioribus. Fructus desideratur.

Yunnan: Chungtien, Haba, alt. 3000 m., in silvis pinetis, VI. 2, 1937, T. T. Yü

11552 (Typus in HP.); Likiang, alt. 3000 m., in declivibus saxosis, VI. 1935, C. W. Wang 21104.

Szechuan: Sikang, Muli, Mt. Mitzuga, alt. 3300 m. in silvis, V. 22, 1937, T. T. Yü 5593.

51. ***C. chengkangensis*** Yü, sp. nov. Pl. XXVI, 2

Species affinis *C. nitido* Jacq. sed cymis 2—3-floris, calycibus pilosulis, carpidiis 3—5 diversa. Species *C. adpresso* Bois affinis sed planta nostra erecto-divaricata, foliis utrinque parce pilosis, staminibus 20, pyrenis 3—5 differt.

Frutex 1—2-metralis, ramosissimus, divaricatus; ramuli hornotini pilis flavo-strigosis dense induti, annotini glabrescentes, vetustiores cinereo-brunnei vel cinereo-nigri. Folia decidua, ovata, late elliptica vel suborbicularia, apice acuta, basi late cuneata vel rotundata, 10—18 mm. longa, 7—15 mm. lata, supra saturate viridia, subtus pallidiora, utrinque parce strigilloso-pilosa, nervis lateralibus utrinsecus 3—5 ut costa supra leviter impressis subtus elevatis; petiolus flavo-pilosulus, 1—3 mm. longus; stipulae membranaceae, lineari-lanceolatae, flavo-pilosulae. Cymae 2—3-florae, ramulos laterales brevissimos paucifoliosos terminantes; pedicelli 2—4 mm. longi, parce flavo-pilosuli; calycis tubus campanulatus, sparse pilosulus, dentibus triangularibus, acutis vel obtusis, extus pilosulis, intus glabris vel apice villosulis; petala erecta, ovata vel obovata, apice obtusa, basi breviter unguiculata, 3—4 mm. longa, 2—3 mm. lata, alba; stamina 20, petalis breviora; carpidia 4—5, apice pilosa, styli glabri, staminibus breviores. Fructus ellipsoideus, 8—9 mm. longus, coccineus, nutans; pyrenae 3, rarius 4—5.

Yunnan: Cheng-kang, in declivibus saxosis, alt. 2300—3400 m. VII. 24, 1938, T. T. Yü 16959 (Typus in HP.); Weihsi, Pai-ma-lu, alt. 2300 m., K. M. Feng 4354.

55b. ***C. rubens*** W. W. Smith var. ***minimus*** Yü, var. nov.

A typo recedit praecipue foliis minoribus, 8—10 mm. longis, 6—8 mm. latis, apice saepe obtusis vel mucronatis, fructibus minoribus plerumque 3-pyrenatis.

Szechuan: Sikang, Wa-se-kou, in declivibus saxosis, V. 9, 1940, K. L. Chü 7919 (Typus in HP.); Li Hsien, C. Ho & T. L. Chow 14091, 46779.

III. PYRACANTHA Roem.

P. densiflora Yü, sp. nov.

Species proxima *P. fortuneanae* (Maxim.) Li a qua pedunculis, pedicellis etiam calycis tubis cum dentibus dense ferrugineo-tomentosis; a *P. mekongensi* Yü spinigera, foliis obovatis obtusis subsessilibus differt.

Frutex spinosus, spinis robustis 1—2 cm. longis; ramuli hornotini dense ferrugineo-tomentosi, annotini glabrescentes vel glabri, purpureo-fusci. Folia ramulorum brevissimorum fasciculata, obovata vel obovato-elliptica, 1—1.8 cm. longa, 6—9 cm. lata, apice obtusa vel truncata, basi late cuneata, margine basi vel in quarta parte inferiore integra sursum crenato-serrata, dentibus saepe subincurvis, supra nitidula saturate viridia, subtus pallida, initio sparse tomentosa, demum glabra, nervis utrinsecus 3—4 ut costa supra leviter impressis subtus paulo elevatis; petioli breves, graciles, 1—2 mm. longi. Corymbus 6—10-florus, 1.5—2.5 cm. diam., ramulos laterales breves foliosos terminans; pedicelli breves, circiter 2 mm. longi ut pedunculus dense tomentosi; flores 8—12 mm. diam.; calycis tubus turbinatus, dentibus triangularibus, extus dense tomentosis; petala ovata, 4—6 mm. longa 3—4 mm. lata, alba; stamina 20, 2—3 mm. longa, petalis breviora; styli

5, liberi, staminibus aequilongi; carpidia 5, apice pilosa. Fructus desideratur.

Kwangsi: Lung-ling, alt. 1000 m., in fruticetis, VI. 1957, C. F. Liang & T. L. Wu 32567 (Typus in HC.).

P. mekongensis Yü, sp. nov.

Species ex affinitate *P. fortuneanae* (Maxim.) Li, a qua suffruticosis plerumque non spinosis, foliis in ramulis abbreviatis fasciculatis, inflorescentiis dense floris, calycibus extus tomentosis inter alia recedit.

Frutex 1-metralis, ramis robustis; ramuli hornotini tomento adpresso rubiginoso dense vestiti, annotini glabrescentes griseo-fusci. Folia alternata, ramulorum floriferorum brevissimorum fasciculata, oblonga vel obovato-oblonga, 3—4.5 cm. longa, 1—1.3 cm. lata, acuta, basi cuneata et attenuata, margine crenato-serrata, glabra, supra saturate viridia costa impressa, subtus pallide viridia, nervis utrinsecus 5—7 ut costa leviter elevatis; petioli 4—6 mm. longi, cito glabrescentes. Corymbus compactus apicem ramulorum lateralium brevium terminans, 2—3 cm. diam., pedicelli crassi, 1—3 mm. longi, rubiginoso-tomentosi; flores 8—10 mm. diam.; calycis tubus turbinatus, dentibus triangularibus, acuminatis extus rubiginoso-tomentosis; petala obovata, 4—5 mm. diam., alba, glabra, basi abrupte unguiculata; stamina 20, 2—3 mm. longa; styli 5, liberi, staminibus subaequilongi; carpidia 5, apice ovarii dense albo-villosa, ventre libera, dorso tertia parte tubo calycis adnata. Fructus immaturus subglobosus; pyrenae 5.

Yunnan: Lan-tsang, in valle rivuli Mekong, in arena, alt. 800 m., V. 1936, C. W. Wang 76704 (Typus in HP.).

IV. SORBUS L. SYSTEMA SORBI SINICAE

Sect. I. *Aria* Pers.

Folia simplicia, serrata vel leviter lobata; styli 2—3, rarius 4, basi connati vel liberi; fructus calyce persistente.

Ser. 1. **Megalocarpace** Yü, ser. nov.

Fructus subglobosus, 3—4-locularis; folia utrinque glabra vel subtus in axillis nervorum lanuginoso-barbata. Typus seriei: *S. megalocarpa* Rehd.

Speciebus 2: 1. *S. megalocarpa* Rehd., 2. *S. arguta* Yü.

Ser. 2. **Thibeticae** Yü, ser. nov.

Fructus globosus, ovoideus vel oblongo-ovoides, 2—3-locularis; folia subtus dense tomentosa. Typus seriei: *S. thibetica* (Card.) Hand.-Mazz.

Speciebus 5: 3. *S. zahlbruckneri* Schneid., 4. *S. thibetica* (Card.) Hand.-Mazz., 5. *S. xanthoneura* Rehd., 6. *S. pallescens* Rehd., 7. *S. coronata* (Card.) Yü & Tsai.

Sect. II. *Micromeles* (Dcne.) Rehd.

Folia simplicia, serrata vel rarius leviter lobata; styli 2—3, rarius 4—5, basi connati; fructus calyce deciduo, apice cicatrice circulari notatus.

Ser. 3. **Alnifoliae** Yü, ser. nov.

Folia utrinque glabra vel subtus in axillis nervorum barbata, nervis fere rectis in dentes excurrentibus; fructus subglobosus vel ellipsoideus, laevis vel leviter lenticellatus. Typus seriei: *S. alnifolia* (Sieb. & Zucc.) K. Koch.

Speciebus 4: 8. *S. alnifolia* (Sieb. & Zucc.) K. Koch, 9. *S. caloneura* (Stapf) Rehd., 10. *S. rhamnoides* (Dcne.) Rehd., 11. *S. meliosmifolia* Rehd.

Ser. 4. **Thomsonianae** Yü, ser. nov.

Folia utrinque glabra vel subtus in axillis nervorum barbata, nervis leviter curvatis ante marginem in venulas dissolutis; fructus globosus vel ovoideus, laevis vel leviter lenticellatus. Typus seriei: *S. thomsonii* (King) Rehd.

Speciebus 5: 12. *S. granulosa* (Bertol.) Rehd., 13. *S. globosa* Yü & Tsai, 14. *S. thomsonii* (King) Rehd., 15. *S. aronioides* Rehd., 16. *S. keissleri* (Schneid.) Rehd.

Ser. 5. **Folgerianae** Yü, ser. nov.

Folia maturitate subtus albo-tomentosa, nervis rectis in dentes majores excurrentibus; fructus ellipsoideus vel subglobosus, parce lenticellatus. Typus seriei: *S. folgeri* (Schneid.) Rehd.

Speciebus 2: 17. *S. folgeri* (Schneid.) Rehd., 18. *S. hemsleyi* (Schneid.) Rehd.

Ser. 6. **Ferrugineae** Yü, ser. nov.

Folia plerumque subtus ferrugineo-tomentosa, nervis sive curvatis ante marginem in venulas dissolutis, sive rectis, ad marginem in dentes majores excurrentibus; fructus subglobosus vel ovoideus, laevis vel paulo lenticellatus. Typus seriei: *S. ferruginea* (Wenzig) Rehd.

Speciebus 4: 19. *S. rubiginosa* Yü, 20. *S. astateria* (Card.) Hand.-Mazz., 21. *S. ferruginea* (Wenzig) Rehd., 22. *S. epidendron* Hand.-Mazz.

Sect. III. **Sorbus**

Folia composita, foliola serrata rarius fere integra; styli 2—4, rarius 5, plerumque liberi; fructus calyce persistente.

Ser. 7. **Insignes** Yü, ser. nov.

Gemmae glabrae vel subglabrae; foliola 2—6-juga, margine revoluta, crenulata vel crenato-serrulata; fructus albus. Typus seriei: *S. insignis* (Hook. f.) Hedl.

Speciebus 3: 23. *S. harrowiana* (Balf. & W. W. Smith) Rehd., 24. *S. insignis* (Hook. f.) Hedl., 25. *S. helenae* Koehne.

Ser. 8. **Tianschanicae** Kom.

Gemmae albo-lanatae; foliola 5—7-juga, serrata; flores magni; fructus ruber.

Speciebus 2: 26. *S. tianschanica* Rupr., 27. *S. tapashana* Schneid.

Ser. 9. **Discolores** Yü, ser. nov.

Gemmae glabrae vel parcissime villosae; foliola (3—)4—8-juga, margine serrata; fructus albus vel ruber. Typus seriei: *S. discolor* (Maxim.) Maxim.

Speciebus 6: 28. *S. hupehensis* Schneid., 29. *S. oligodonta* (Card.) Hand.-Mazz., 30. *S. wilsoniana* Schneid., 31. *S. amabilis* Cheng, 32. *S. sargentiana* Koehne, 33. *S. discolor* (Maxim.) Maxim.

Ser. 10. **Pohuashanensis** Yü, ser. nov.

Gemmae dense villosae; foliola 5—7-juga, margine serrata; fructus scarlatinus. Typus seriei: *S. pohuashanensis* (Hance) Hedl.

Speciebus 2: 34. *S. esserteauiana* Koehne, 35. *S. pohuashanensis* (Hance) Hedl.

Ser. 11. **Reductae** Yü, ser. nov.

Frutex humilis; gemmae parcissime villosae; foliola 4—9-juga, margine serrata; fructus albus vel carneus. Typus seriei: *S. reducta* Diels.

Speciebus 2: 36. *S. reducta* Diels, 37. *S. poterifolia* Hand.-Mazz.

Ser. 12. ***Scalares*** Yü, ser. nov.

Gemmae plerumque glabrae; foliola (4—)7—14-juga, marginibus parallelis, praeter apicem brevissime serrulatum integra; fructus ruber, rarius albus. Typus seriei: *S. scalaris* Koehne.

Speciebus 6: 38. *S. obsoletidentata* (Card.) Yü, 39. *S. pteridophylla* Hand.-Mazz., 40. *S. wallichii* (Hook. f.) Yü, 41. *S. kiukiangensis* Yü, 42. *S. scalaris* Koehne, 43. *S. glomerulata* Koehne.

Ser. 13. ***Rehderianae*** Yü, ser. nov.

Gemmae saepe rufo-pilosae; foliola 7—13-juga, argute serrulata; fructus albidus vel carneus raro purpurascens. Typus seriei: *S. rehderiana* Koehne.

Speciebus 6: 44. *S. rehderiana* Koehne, 45. *S. randaiensis* (Hayata) Koidz., 46. *S. vilmorini* Schneid., 47. *S. monbeigii* (Card.) Yü, 48. *S. koehneana* Schneid., 49. *S. prattii* Koehne.

Ser. 14. ***Multijugae*** Yü, ser. nov.

Gemmae glabrae vel parce rufo-pilosae; foliola (8—)12—21-juga, argute serrulata; fructus purpurascens vel albus. Typus seriei: *S. multijuga* Koehne.

Speciebus 4: 50. *S. filipes* Hand.-Mazz., 51. *S. rufopilosa* Schneid., 52. *S. setschwanensis* (Schneid.) Koehne, 53. *S. multijuga* Koehne.

SPECIES ET VARIETATES NOVAE GENERIS SORBI

2. ***S. arguta*** Yü, sp. nov.

Species affinis *S. megalocarpae* Rehd. a qua foliis oblongo-ovatis vel ovato-lanceolatis, nec elliptico-obovatis, margine argute denticulato-serratis, nec crenulato-serratis, fructibus minoribus distinguitur.

Arbor tenuis 4—5-metralis; ramuli teretes cinereo-fusci, annotini rubro-fusci initio sparse villosi mox glabri, lenticellis parvis instructi; gemmae ovoideae, acutae, pauciperulatae, glabrae. Folia decidua, matura chartacea, oblongo-ovata vel ovato-lanceolata, acuminata, basi late cuneata vel subrotundata, 6.5—10 cm. longa et 2.5—4 cm. lata, margine argute irregulariter dupliciter denticulato-serrata, dentibus saepe ad glandulas reductis, supra glabra, subtus in axillis nervorum lanuginoso-barbata, nervis utrinsecus 13—18 fere rectis, in dentes excurrentibus, supra ut costa impressis, subtus elevatis; petioli circ. 1 cm. longi, glabri. Inflorescentia fructifera corymbosa 3—4 cm. alta et 2—4 diam., ad apicem ramulorum brevium, foliis pluribus congestis sustentantia; pedunculi ut pedicelli sparse villosi. Fructus subglobosus, 1—1.2 cm. diam., 4-locularis, rubro-fuscus in sicco, albo-lenticellatus, calyce persistente, sepalis recurvis triangularibus acutiusculis intus glabris extus sparse villosis coronatus.

Szechuan: Ping-shan, Mt. Ching-ping, alt. 1120 m., in silvis, V. 26, 1934, T. H. Tu 5449 (Typus in HP.).

9b. ***S. caloneura*** Rehd. var. ***kwangtungensis*** Yü, var. nov.

A typo recedit petiolis longioribus, 2—3 cm. longis, nervis paucioribus utrinsecus 8—10, nec 10—18.

Kwangtung: Lok-chang, VI. 16, 1929, C. L. Tso 21123 (Typus in HP.).

19. ***S. rubiginosa*** Yü, sp. nov.

Ex affinitate *S. granulosa* Rehd., sed distat ramulis foliis petiolis pedicellis calici-

busque dense rubiginoso-tomentosis, fructibus minoribus leviter lenticellatis.

Arbor vel frutex robustus 10—15-metralis; ramuli crassi, teretes, initio dense rubiginoso-tomentosi, demum glabrescentes, hornotini glabri, purpureo-fusci vel atro-fusci, lenticellis parvis albidis sparse instructi; gemmae ovoideae, obtusae, apice villosulo excepto glabrae, pauci-perulatae. Folia decidua, chartacea, ovata, elliptico-ovata vel elliptico-obovata, 9—14 cm. longa, 5—8 cm. lata, apice brevi-acuminata rarius cuspidata, basi late cuneata vel rotundata, margine tertia vel dimidia parte inferiore integra, sursum crenato-serrata, initio utrinque dense rubiginoso-tomentosa demum supra glabrescentia, nervis utrinsecus 10—12 leviter curvatis ante marginem in venulas dissolutis; petioli 2—3 cm. longi, supra canaliculati, rubiginoso-tomentosi. Inflorescentia corymbosa 20—30-flora, densa, 4—5 cm. diam. et alta; pedicelli 2—4 mm. longi ut pedunculi calyxque extus rubiginoso-tomentosi; sepala triangulari-ovata, acutiuscula, 1.5 mm. longa, extus tomentosa, intus glabra; petala late ovata vel elliptica, obtusa vel emarginata, brevissime unguiculata, luteo-alba, intus sparse villosa, 3—4 mm. longa, 2.5—3 mm. lata; stamina 15—20, inaequalia, longiora petalis subaequilonga; styli 3—4 ad medium usque connati, glabri. Fructus subglobosus, 1—1.5 cm. diam., 3—4-locularis, lenticellis parvis dense notatus et apice cicatrice calycis decidui instructus.

Yunnan: Chen-kang, alt. 2600 m., in fruticetis, III. 1939, C. W. Wang 72499; Nan-chiao, alt. 1900 m., in silvis VI. 1936, C. W. Wang 75374 (Typus in HP.); in valle Ming-kwang, G. Forrest 8416; in valle Shweli-Salwin, G. Forrest 26227; Tali, G. Forrest 11556; Yung-chang, G. Forrest 21076, 21096; Shun-ning, T. T. Yü 16146, 16272, 16448, 17478; Lung-ling, H. T. Tsai 55642, 55668, 55733; Wen-shan, H. T. Tsai 51816; Mong-tze, C. W. Wang 83202.

25b. *S. helenae* Koehne var. *argutiserrata* Yü, var. nov.

A typo foliis minoribus, 4.5—7 cm. longis, 2—4 cm. latis, margine argute serratis vel subduplicato-serrulatis recedit.

Szechuan: Sikang, Tan-pa, *Inst. Occid. Sin.* 828. (Typus in HP.).

26b. *S. tianschanica* Rupr. var. *integrifoliolata* Yü, var. nov.

A typo foliolis minoribus, 2.5—5 cm. longis, margine integro vel superne argute serrulato, dentibus utrinsecus circiter 2—5 patulis.

Sinkiang: *Coll. Agric. Pa-Yi* 5, 6 (Typus in HP.).

31. *S. amabilis* Cheng sp. nov., ined.

Habitu *S. wilsonianae* Schneid., sed ramulis, rachisque etiam foliolis subtus ad costam fusco-villosis, praeterea marginibus foliolorum profunde serratis.

Arbor 5—10-metralis; rami crassi, teretes, nigricanti-cinerei, sparse lenticellati, initio fusco-villosi demum glabrescentes; gemmae oblongo-ovatae, acuminatae, pauci-perulatae, apice fusco-villosulo excepto glabrae. Folia (4—)5—6-juga cum petiolo 2.5—3.5 cm. longo 13—17.5 cm. longa; rachis exalata, fusco-villosa demum plerumque glabrata, interstitiis 1—1.8 cm. longis; foliola infima 2 etiam terminale paullo minora, cetera aequalia, oblonga vel oblongo-lanceolata, 4—6.5 cm. longa, 1.5—2 cm. lata, apice acuminata, basi rotundata, obliqua, margine prope basin vel tertia parte inferiore argute serrata, dentibus utrinsecus circiter 9—14, patulis, supra saturate viridia glabra, subtus in costa initio fusco-villosa demum glabrescentia, nervis utrinsecus circiter 9—12, supra leviter impressis subtus prominulis; stipulae herbaceae, ovatae, dentatae, post anthesin deciduae. Inflorescentia ramum verisimiliter longiorem terminans, 12—15 cm. lata, 8—10 cm. longa, subconvexa

vel valde convexa, densiflora, fusco-villosa, demum glabrescens; pedicelli 1—3 mm. longi; flores 7—8 mm. diam.; calycis tubus glaber; sepala triangularia, obtusa, glabra; petala late ovata vel suborbicularia, obtusa, 3—4 mm. longa et lata, alba, medio supra pilis paucis obsita; stamina 20, petalis breviora; carpodia 3—4, basi villosiuscula, staminibus breviora vel subaequilonga. Fructus globosus, ruber, 6—7 mm. longus, sepalis apice incurvis.

Anhwei: Mt. Hwang-shan, alt. 2000 m., in silvis mixtis, X. 4, 1933, M. Chen 1240 (Typus in HP.); ibidem, V. 18, 1935, C. Pei 4033.

41. ***S. kiukiangensis*** Yü, sp. nov. Pl. XXVII, 1

Species similis *S. pteridophyllae* Hand.-Mazz. a qua differt foliolis 7—9-jugis, nec 9—14-jugis, oblongis vel ovato-oblongis, nec ovato-linearibus, stipulis membranaceis, nec herbaceis.

Frutex 3—7-metralis; rami crassi, teretes cinerei vel demum nigro-fusci, sparse lenticellati, glabri; gemmae oblongo-ovoideae, acuminatae, glabrae vel summo apice tantum rufo-pilosae. Folia cum petiolo 1.3—3 cm. longo 11—17 cm. longa; foliola 7—9-juga; rhachis anguste alata, supra canaliculata, subtus rufo-pilosa, interstitiis 6—12 mm. longis; foliola infima supremaque quam cetera paulo minora, oblonga vel ovato-oblonga, 2.5—3.5 cm. longa, 1.2—1.5 cm. lata, obtusa, basi rotundata leviter obliqua, dimidio anteriore tantum minute sed acutissime serrulata, dentibus utrinsecus circiter 4—8, subincurvis, supra atro-viridia sparse villosa, subtus valde glauca, costa nervisque dense rufo-villosis; stipulae siccae membranaceae, lanceolatae interdum bifidae, caducae. Corymbi ramulos longos breves terminantes, compositi, multiflori, 4—6 cm. lati et longi, subconvexi, pedunculis pedicellisque tenuibus rufo-villosis lenticellis minutis sparsis; tubus calycis campanulatus, glaber, sepalis triangularibus, intus villosis; petala ovata, obtusa, cum unguiculo 3 mm. longa, glabra, staminibus circiter triplo longiora; styli 5, fere liberi, basi villosi. Fructus ovoideus, circiter 5—8 mm. diam., ruber vel rubro-fuscus, sepalis conniventibus.

Yunnan: in valle Kiukiang, Chia-lah-mu-tu, alt. 3000—3600 m., in fruticetis, VIII. 6, 1938, T. T. Yü 19710 (Typus in HP.).

Tibet: Kong-bo, Tun-la, Na-yu, alt. 3800 m. VII. 8, 1938, F. Ludlow, G. Sheriff & G. Taylor 5782a (Ex Herb. Mus. Britan.).

41b. ***S. kiukiangensis*** Yü var. ***glabrescens*** Yü, var. nov.

A typo recedit folioliis acutis utrinque glabrescentibus.

Yunnan: Mt. Ko-li-kung-shan, in valle Bu-cah-wang, alt. 2800 m., in fruticetis, IX. 3, 1938, T. T. Yü 20071 (Typus in HP.).

V. PHOTINIA Lindl.

SYSTEMA PHOTINIAE SINICAE

Sect. I. *Photinia*

Folia coriacea, persistentia; inflorescentia fere composito-corymbosa; pedunculi pedicellique non verrucosi.

Ser. 1. ***Serrulatae*** Kuan, ser. nov.

Folia serrulata. Typus seriei: *P. serrulata* Lindl.

Species 22: 1. *P. serrulata* Lindl., 2. *P. franchetiana* Diels, 3. *P. lasiopetala* Hayata, 4. *P. bodinieri* Lévl., 5. *P. davidsoniae* Rehd. & Wils., 6. *P. glabra* (Thunb.) Maxim.,

7. *P. stenophylla* Hand.-Mazz., 8. *P. lochengensis* Yü, 9. *P. glomerata* Rehd. & Wils., 10. *P. lanuginosa* Yü, 11. *P. kwangsiensis* Li, 12. *P. chingiana* Hand.-Mazz., 13. *P. chihsiniana* Kuan, 14. *P. anlungensis* Yü, 15. *P. beckii* Schneid., 16. *P. lasiogyna* (Franch.) Schneid., 17. *P. griffithii* Dcne., 18. *P. loriformis* W. W. Smith, 19. *P. prionophylla* (Franch.) Schneid., 20. *P. berberidifolia* Rehd. & Wils., 21. *P. prunifolia* (Hook. & Arn.) Lindl., 22. *P. raupingensis* Kuan.

Ser. 2. **Integrifoliae** Kuan, ser. nov.

Folia integra vel undulata (*P. crassifolia* Lévl. et *P. ardisiifolia* Hayata interdum serrata). Typus seriei: *P. integrifolia* Lindl.

Species 7: 23. *P. integrifolia* Lindl., 24. *P. ardisiifolia* Hayata, 25. *P. flavidiflora* W. W. Smith, 26. *P. sambusiflora* W. W. Smith, 27. *P. daphniphyllodes* Hayata, 28. *P. crassifolia* Lévl., 29. *P. tushanensis* Yü.

Sect. II. **Pourthiaea** (Dcne.) Schneid.

Folia papyracea, decidua; inflorescentia cymosa, paniculata umbellato-racemosa vel composito-corymbosa, pedunculi pedicellisue frutifer manifeste verrucosi.

Ser. 3. **Multiflorae** Kuan, ser. nov.

Inflorescentia multiflora, corymbosa, paniculata vel composito-corymbosa. Typus seriei: *P. beauverdiana* Schneid.

Species 16: 30. *P. beauverdiana* Schneid., 31. *P. lucida* (Dcne.) Schneid., 32. *P. callosa* Chun, 33. *P. fokiensis* (Franch.) Franch., 34. *P. tsaii* Rehd., 35. *P. bergerae* Schneid., 36. *P. parviflora* Card., 37. *P. obliqua* Stapf, 38. *P. impressivena* Hayata, 39. *P. blinii* (Lévl.) Rehd., 40. *P. benthamiana* Hance, 41. *P. schneideriana* Rehd. & Wils., 42. *P. lancifolia* Rehd. & Wils., 43. *P. podocarpifolia* Yü, 44. *P. hookeri* (Dcne.) Merr., 45. *P. pilosicalyx* Yü.

Ser. 4. **Pauciflorae** Kuan, ser. nov.

Inflorescentia pauciflora, floribus saepe 6—10, umbellato-racemosa, corymbosa vel cymosa. Typus seriei: *P. parvifolia* (Pritz.) Schneid.

Species 3: 46. *P. parvifolia* (Pritz.) Schneid., 47. *P. villosa* (Thunb.) DC., 48. *P. hirsuta* Hand.-Mazz.

SPECIES ET VARIETATES NOVAE GENERIS PHOTINIAE

8. ***P. lochengensis*** Yü, sp. nov.

Species revocat *P. stenophyllae* Hand.-Mazz., differt foliis oblanceolatis, margine undulatis serrulatisque, nervis utrinsecus 9—13, fructibus minoribus.

Arbor humilis vel frutex (?), ramis tenuibus, juvenalibus sparse villosis mox glabrescentibus purpureo-brunneis vel nigro-brunneis, lenticellatis; gemmae parvae, obovoideae, acutiusculae, atro-brunneae, glabrae. Folia coriacea, oblanceolata rarius lanceolata, 3.5—5 cm. longa et 1—2 cm. lata, acuta saepe mucronata, basi cuneata, margine leviter revoluta undulata et serrulata, serraturis glanduliferis incurvis, supra laete viridia, nitidula, sicco luteo-brunnea, utrinque glabra vel initio subtus in parte inferiore costae sparse villosa; costa supra immersa subtus elevata, nervis utrinsecus 9—13 subtus elevatis; petioli 5—8 mm. longi, initio villosi, demum glabrati. Corymbus terminalis, satis densus, 2—4 cm. diam., glaber; pedicelli 2—4 mm. longi, glabri; flores 3—4 mm. diam., praeter ovarium glabri; calycis tubus campanulatus, circiter 1.5 mm. longus et latus, dentibus

erectis laete triangularibus, circiter 1 mm. longis; petala alba, obovata, circiter 2 mm. longa, apice rotundata, breviter unguiculata; stamina 20, petalis breviora; styli 2, rarius 3, liberi, ovarium semisuperum, apice dense villosum. Fructus subglobosus, circiter 3 mm. diam., glaber, sepalis persistentibus incurvis.

Kwangsi: Lo-cheng, W. Chen 84410 (Typus in HC.); ibidem, R. C. Ching 5314.

9b. ***P. glomerata*** Rehd. & Wils. var. ***cuneata*** Yü, var. nov.

A typo recedit foliis lanceolatis vel oblanceolatis, 12—15 cm. longis, 3—5 cm. latis, basi cuneatis, petiolis 1.5—2 cm. longis.

Yunnan: Yung-jen, alt. 1700 m., in saltibus, V. 23, 1933, H. T. Tsai 52879 (Typus in HP.).

9c. ***P. glomerata*** Rehd. & Wils. var. ***microphylla*** Yü, var. nov.

A typo recedit foliis oblongis vel obovato-oblongis, basi late cuneatis, petiolis 1—2 cm. longis.

Yunnan: Teng-chuan, Mt. Chih-shan, alt. 2600 m. in fruticetis, IX. 18, 1940, R. C. Ching 24894 (Typus in HP.).

10. ***P. lanuginosa*** Yü sp. nov.

Species affinis *P. glomeratae* Rehd. & Wils., foliis margine argute serratis, pedunculo pedicellisque albo-lanuginosis, calycis tubo dentibusque fere glabris discrepat.

Arbor vel frutex, altitudo ignota; ramuli hornotini lana densa adpressa cinereo-alba induti, annotini glabrescentes, cinereo-brunnei demum nigro-brunnei; gemmae ovoideae, acutae, 3—4 mm. longae, atro-brunneae, glabrae. Folia coriacea, oblongo-elliptica vel oblongo-obovata, 8—15 cm. longa, 4—5 cm. lata, breve acuminata vel acuta, basi late cuneata usque subrotundata, margine leviter revoluta, argute serrata, supra laete viridia, lucida, glabra, subtus pallidiora, praesertim ad costam sparse villosa, demum interdum glabra, utrinsecus nervis 18—20 subtus ut costa elevatis; petioli 2.5—4 cm. longi, initio dense lanuginosi, demum glabrescentes. Corymbus multiflorus, 9—12 cm. diam., 7—8 cm. longus, ramulos breves terminans; pedicelli 2—5 mm. longi ut pedunculus dense lanuginosi; flores 5—6 mm. diam.; calycis tubus late turbinatus, circiter 1 mm. longus, extus perparce villosulus vel fere glaber, dentibus ovatis, circiter 1 mm. longis, obtusis, margine ciliatis; petala alba, suborbicularia, circiter 2 mm. diam., apice rotundata, basi breviter unguiculata; stamina 20, petalis breviora; styli 2, fere ad basin liberi; ovarium biloculare, apice dense villosum. Fructus ignotus.

Hunan: Mt. Hsüeh-feng-shan, 1954, C. T. Li 1882 (Typus in HP.).

13. ***P. chihsiniana*** Kuan, sp. nov.

Affinis *P. kwangsiensis* Li, sed ramulis, pedunculis, pedicellis et calycum tubis cum dentibus extus dense cinereo-tomentosis, foliis brevioribus angustioribusque, apice acutis vel breve acuminatis, basin versus attenuatis, petiolis brevioribus et fructibus minoribus recedit.

Arbor parva, 10-metralis, ramulis hornotinis dense cinereo-tomentosis, annotinis fere glabris, griseis, lenticellatis; gemmis ovoideis, acutiusculis, circ. 2 mm. longis, fuscis, cinereo-tomentosis. Folia coriacea, oblongo-lanceolata, 5—11 cm. longa et 1.5—3 cm. lata, apice acuta vel breve acuminata, basin versus attenuata, margine leviter revoluta et remote serrulata, serraturis glanduliferis, supra viridia, nitidula, subtus pallidiora, initio pilis griseis utrinque conspersa, mox glabrata, costa supra impressa, subtus elevata, nervis utrinsecus 12—15, petiolo 5—20 mm. longo, initio cinereo-tomentoso, demum fere glabro,

stipulis subulatis, circ. 3 mm. longis, caducis, cinereo-tomentosis. Inflorescentia composito-corymbosa, terminalis, multiflora, 6—7 cm. diam., pedunculis pedicellisque dense cinereo-tomentosis, pedicellis circ. 3 mm. longis; floribus circ. 5 mm. diam.; calycum tubis cupuliformibus, 1 mm. longis, extus cinereo-tomentosis, dentibus triangularibus, 1 mm. longis, apice obtusis, extus cinereo-tomentosis, intus glabris; petalis albis, suborbicularibus, 3 mm. diam., glabris; staminibus 20, 1—2 mm. longis; stylis 2, liberis, basi villosis. Fructus ovoideus, 3 mm. longus et 2 mm. diam., ruber, calycis dentibus persistentibus villosulis coronatus, seminibus 2—3, ellipsoideis, 2 mm. longis, nigris.

Kwangsi: Lin-kwei, in silvis, V. 8, 1950, C. S. Chung 808097 (Typus in HK.*); ibidem, XI. 22, 1953, C. F. Liang 31096; Lin-kwei, Yan-shan, IX. 20, 1951, C. S. Chung 808829, 808871; XII. 23, 1950, C. S. Chung 808679; Ping-lou, IX. 23, 1958, Z. Z. Chen 52327; Kwei-lin, VII. 8, 1937, W. T. Tsang 27773; VIII. 1937, W. T. Tsang 27992; ibidem, III. 29, 1948, C. N. Tang 13423.

14. ***P. anlungensis*** Yü, sp. nov.

Species ex affinitate *P. crassifoliae* Lévl. a qua foliis argute serrulatis, non integris, basi late cuneatis, nervis utrinsecus 30—34, non 15—17, petiolis longioribus, pedicellis calycibusque glabris inter alia divergit.

Frutex 2-metralis; ramuli hornotini tomento denso adpresso cinereo induti, annotini glabrescentes, cinereo-brunnei, lenticellati; gemmae oblongae, acutiusculae, glabrae, circiter 6—8 mm. longae. Folia persistentia, coriacea, oblonga, oblongo-lanceolata vel oblanceolata, 10—15 cm. longa, 3—4.5 cm. lata, apice acuta vel breviter acuminata, basi late cuneata, rarius subrotundata, margine leviter revoluta et serrulata, serraturis incurvis glanduliferis, supra laete viridia, nitidula, initio pilis brevissimis conspersa, mox glabrata, subtus lutescentia, glauca, papillosa, praesertim ad costam nervosque dense tomentosa, utrinsecus nervis 30—34 subtus ut costa elevatis; petioli 8—15 mm. longi, dense tomentosi, demum fere glabrescentes. Corymbus multiflorus, circiter 15 cm. diam., dense tomentosus, ramulum brevem terminans; pedicelli graciles, glabri, 2—3 mm. longi; calycis tubus late turbinatus, dentibus ovato-triangularibus, extus glabris; styli 2, ovarium apice villosum. Fructus immaturus obovoideus, 2—3 mm. longus, glaber.

Kweichow: An-lung, alt. 1300 m. VI. 15, 1960, C. S. Chang & Y. T. Chang 5359 (Typus in HP.).

21b. ***P. prunifolia*** (Hook. & Arn.) Lindl. var. ***denticulata*** Yü, var. nov.

A typo foliis oblongo-lanceolatis, acutis, basi cuneatis, margine argute duplicato-serratis serraturis glanduliferis, pedicellis pedunculisque sparse villosis, calyce glabro differt.

Chekiang: Ping-yang, in bambusa fruticetis, VI. 28, 1959, S. Y. Chang 5867 (Typus in HP.).

Kwangsi: Hsing-an, V. 28, 1953, Kwangsi Exp. 920.

22. ***P. raupingensis*** Kuan, sp. nov.

Affinis *P. prunifoliae* (Hook. & Arn.) Lindl., sed inflorescentiis dense tomentosis, foliis basi cuneatis et petiolis nec glandulosis nec dentatis differt.

Arbor 4—5-metralis; ramuli hornotini dense villosi, annotini glabri, purpureo-nigri, minute lenticellati. Folia coriacea, oblonga, obovata vel oblongo-elliptica, 4—8 cm. longa et 2—3 cm. lata, apice acuta vel obtusa, simul cuspidata, rarius acuminata, basi cuneata,

* HK=Herb. Inst. Bot. Kwangsi.

margine serrulata, supra viridia, nitidula, glabra, subtus pallidiora, nigro-punctata, costa supra impressa, subtus elevata, initio sparse villosa, mox glabra, nervis utrinsecus 12—17; petioli 8—15 mm. longi, glabri, laevi. Corymbus compositus, terminalis, dense multiflorus, 3—7 cm. diam.; pedunculi pedicellique dense albo-tomentosi; bractae bracteolaeque subulatae, 3—4 mm. longae, dense albo-tomentosae; flores 7—8 mm. diam.; calycis tubus cupuliformis, circ. 1 mm. longus, extus dense albo-tomentosus, dentibus triangularibus, acutis, circ. 1 mm. longis, extus sparse villosulis; petala alba, obovata, 2 mm. longa, apice rotundata, basi breviter unguiculata, villosula; stamina 20, petalis breviora; ovarium biloculare, apice dense villosum; styli 2, fere ad basin connati. Fructus ovoideus, 5—6 mm. longus et 3—4 mm. diam., ruber; semina 2, ovoidea, 2 mm. longa, brunnea.

Kwangtung: Rau-ping, Feng-hwang-shan, in silvis, N. K. Chun 42691 (Typus in HC.); Lo-fu-shan, IV. 16, 1931, N. K. Chun 43090; Tseng-cheng, V. 2, 1932, W. T. Tsang 20402; Tsung-hua, V. 1935, W. T. Tsang 25130; Hui-yang, III. 1932, T. M. Tsui 164; sine loco, W. Y. Chun, 4839, 4894.

Kwangsi: Shih-wan-ta-shan, in silvis, alt. 780 m., XI. 3, 1928, R. C. Ching 8361. 23b. ***P. integrifolia*** Lindl. var. ***yunnanensis*** Yü, var. nov.

A typo foliis lanceolatis vel oblanceolatis, acuminatis, pedicellis pedunculisque sparse villosis recedit.

Yunnan: Kung-shan (Champutung), alt. 1600—1800 m. in fruticetis, X. 1, 1940, K. M. Feng 8153; Wei-si, alt. 2500 m., V. 26, 1940, K. M. Feng 4167 (Typus in HP.).

29. ***P. tushanensis*** Yü, sp. nov.

Species ex affinitate *P. crassifoliae* Lévl., sed foliis majoribus, calycis tubo longiore extus dense cinereo-villoso differt.

Frutex 5-metralis; ramuli crassi, hornotini tomento denso adpresso cinereo induti, annotini glabrescentes, deinde cinereo-brunnei vel cinereo-nigri. Folia persistentia, coriacea, oblango-elliptica, 11—17 cm. longa, 3—5 cm. lata, apice acuta vel obtusa, plerumque mucronata, basi rotundata vel subcordata, margine paulo revoluta integra vel remotiuscule crenulata, supra atro-viridia initio tomentosa demum glabrescentia, subtus tomento denso cinereo vel fulvido persistente induta, indumento tantum in senectute delabenti; costa media supra impressa infra prominula, nervis utrinque 13—15 vix ad marginem attingentibus cum reticulis nervulorum supra obscuris infra in sicco parum prominentibus; petioli crassi brevissimi vel subsessiles, primum dense cinereo-tomentelli sero subglabri. Corymbus multiflorus terminalis, ad 9 cm. altus et latus, rachi ramulisque multoties divisus dense cinereo-tomentosis; pedicelli 2 mm. longi; flores 5—6 mm. diam.; calycis tubus tubuliformis, 3—5 mm. longus, dense albo-villosus, dentibus ovatis, circ. 1 mm. longis, extus villosis intus glabris; petala obovata, 2 mm. longa, glabra, basi brevilinguiculata; stamina 20, petalis multo breviora; styli 2, ovarium biloculare, apice dense albo-villosum. Fructus immaturus.

Kweichow: Tu-shan, in fruticetis, clivis apricis, alt. 840 m. VII. 11, 1959, Lipo Exp. 1296 (Typus in HP.).

32. ***P. callosa*** Chun, sp. nov. ined.

Proxima *P. fokienensi* Card., foliis crebre serratis, serraturis calloso-mucronulatis, floribus minoribus, pedicellis sepalisque brevioribus differt. Comparabilis *P. beauverdianae* Schneid. sed differt foliis chartaceis, lanceolatis vel oblango-lanceolatis, subtus

glabris, serraturis calloso-mucronulatis, sepalis brevioribus et fructibus minoribus.

Frutex vel arbor parva, 12 m. alta; ramuli glabri, griseo-fusci, lenticellati; gemmae ovoideae, 2—3 mm. longae, perulis fuscis, acutis, glabris. Folia lanceolata vel oblongo-lanceolata, 5.5—13 cm. longa et 1.5—3.5 cm. lata, apice caudata vel acuminata, basi cuneata, margine leviter revoluta et crebre serrulata, serraturis acutis, calloso-mucronulatis vel interdum subintegra, utrinque glabra, costa supra impressa, subtus elevata, nervis utrinsecus 12—16; petioli 5—15 mm. longi, glabri. Inflorescentia composito-corymbosa, terminalis, multiflora, 4—6 cm. diam.; pedunculo pedicellique glabri, lenticellati; pedunculus crassus, 3—4 cm. longus; pedicelli 3—7 mm. longi; flores 6—9 mm. diam.; calycis tubus campanulatus, 1—1.5 mm. longus, glaber, dentibus ovatis, 5—8 mm. longis, obtusis, glabris; petala alba, obovato-oblonga, 2—3 mm. longa, glabra, basi breviter unguiculata; stamina 20, petalis leviter breviora; styli 2—3, connati, glabri. Fructus ovoideus, 4—6 mm. longus et 3—4 mm. diam., nigrescens, glaber, calycibus persistentibus, pedicellis fructiferis 5—9 mm. longis, manifeste verrucosis. Semen 1, ovoideum, circ. 4 mm. longum, nigrum.

Kwangtung: Sun-yi, in silvis, IV. 20, 1932, C. Wang 32130 (Typus in HC.); ibidem, IV. 28, 1932, C. Wang 31607, 32255; ibidem, IV. 26, 1931, S. P. Ko 51361; Fang-cheng, IV. 13, 1956, Hopou Exp. Acad. Sin. 2371.

Kwangsi: Shih-wan-ta-shan, in silvis, alt. 780 m., XI. 3, 1928, R. C. Ching 8373; ibidem, VI. 1933, W. T. Tsang 22441; ibidem, IX. 6, 1934, W. T. Tsang 24222; Pai-show, VIII. 1937, Y. W. Taam 25; Da-ming-shan, VIII. 23, 1951, C. S. Tsai 5335; Lung-sheng, VIII. 11, 1954, Lungsheng Exp. 157.

43. *P. podocarpifolia* Yü, sp. nov.

Species affinis *P. lancifoliae* Rehd. & Wils. a qua foliis margine fere integris vel remotiuscule serrulatis, petiolis brevioribus, floribus minoribus 5—8 mm. diam. inter alia differt; a *P. stenophyllae* Hand.-Mazz. ramulis foliis subtus inflorescentiisque dense cinereo-tomentosis recognoscitur.

Frutex 1—2-metralis; ramulis initio dense cinereo-tomentosis, mox glabrescentibus purpureo-brunneis, lenticellatis. Folia coriacea, lanceolata vel lineari-lanceolata, 4—6 cm. longa, 8—15 mm. lata, acuminata, rarius acuta, basi in petiolum 2—5 mm. longum attenuata, margine remotiuscule serrulata vel fere integra, supra laete viridia lucida glabra, costa media nervisque utrinsecus 7—10 impressis, infra dense cinereo-tomentosa demum glabrescentia, costa media prominula. Corymbus terminalis, 10—20-florus, ad 3—4 cm. altus et latus, pedunculi pedicellique ut calyx dense cinereo-tomentosi demum glabrescentes, lenticellati; pedicelli 1—3 mm. longi; bractee bracteolaeque lineari-lanceolatae, membranaceae, caducae; flores 5—8 mm. diam.; calycis tubus campanulatus, circ. 4 mm. diam. dentibus ovatis, acutis, circ. 1 mm. longis; petala alba, obovata, 5—6 mm. longa, 3—4 mm. lata, obtusa, glabra, brevissime unguiculata; stamina 20, petalis paulo breviora; ovarium triloculare, apice dense albido-villosulum; styli 3, basi connati, circ. 5 mm. longi, stigmatibus capitatis. Fructus ovoideus vel subglobosus, 5—7 mm. longus, 5—6 mm. latus, glaber, calycis dentibus incurvis coronatus; semina 2—3, rubro-brunnea, 4—5 mm. longa.

Kweichow: Lo-tien, in valle Hung-shui-ho, in clivis apricis, in fruticetis, alt. 150—300 m., IV. 8, 1959, Chiennan Exp. 408 (Typus in HP.); ibidem, Chiennan Exp. 709; Petseu, J. Cavalerie 4498, 4283 (Herb Kew).

Kwangsi: Tien-o, C. S. Chang & Y. T. Chang 14; ibidem, C. Wang 43389; Lung-

lin, C. F. Liang & T. L. Wu 32325; Tien-lin, C. C. Chang 10921; Pai-se, Paise Exp. 1534.

45. *P. pilosicalyx* Yü, sp. nov.

Species affinis *P. beauverdianae* Schneid. et *P. schneiderianae* Rehd. & Wils. sed foliis plerumque lanceolatis, pedunculis pedicellisque ut calyces luteo-pilosis inter alia abunde diversa.

Frutex circiter 4 metralis, gracilis; ramuli glabri, purpureo-fusci, lenticellati; gemmae ovoideae, acutae, atro-purpureae, sparse pubescentes. Folia decidua, membranacea, lanceolata, oblongo-lanceolata, rarius oblanceolata, 5—11 cm. longa, 1.5—4.5 cm. lata, acuminata, basi cuneata, argute serrulata, supra laete viridia, nitidula, subtus fulva, utrinque glabra, costa media supra impressa, subtus valde distincta, nervis utrinsecus 9—10, supra obscuris infra leviter elevatis; petioli 5—7 mm. longi, glabri. Corymbus terminalis, multiflorus, 4—8 cm. diam., pedunculi pedicellis ut calyx dense luteo-pilosi. Fructus immaturus ovoideus, 5—6 mm. longus, 3—4 mm. latus, sparsim pilosulus, sepalis persistentibus suberectis plus minusve incurvis coronatus.

Kweichow: An-lung, Mt. Lung-shan, in silvis mixtis, alt. 1200 m., C. S. Chang & Y. T. Chang 4035 (Typus in HP.).

48b. *P. hirsuta* Hand.-Mazz. var. *lobulata* Yü, var. nov.

A typo foliis caudato-acuminatis trilobatis discrepat.

Fokien: Lien-cheng, in silvis mixtis, X. 24, 1932, Y. Ling 4167 (Typus in HP.).

VI. ERIBOTRYA Lindl.

SPECIES NOVA GENERIS ERIBOTRYAE

2. *E. malipoensis* Kuan, sp. nov.

Affinis *E. japonicae* (Thunb.) Lindl., sed foliis subtus, petiolis inflorescentiisque dense ferrugineo-tomentosis, foliis oblongis vel oblongo-ovatis, nervis utrinsecus 20—25 et stylis 3 differt.

Arbor ad 10—15 m. alta, ramulis crassis ferrugineo-tomentosis. Folia coriacea, oblonga vel oblongo-ovata, 30—40 cm. longa, 10—15 cm. lata, apice acuta, basin versus attenuata, margine remote sinuato-dentata, supra viridia, nitentia, glabra, subtus pallidiora, dense ferrugineo-tomentosa, costa crassa, nervis utrinsecus 20—25 fere rectis in dentes excurrentibus; petioli ca. 1 cm. longi, dense ferrugineo-tomentosi. Panícula terminalis, 8—10 cm. longa et lata; pedunculi pedicellisque dense ferrugineo-tomentosi, pedicelli 2—4 mm. longi; bractae bracteolaeque lanceolatae, 3—5 mm. longae, dense ferrugineo-tomentosae; flores ca. 1 cm. diam.; calycis tubus cupuliformis, 3—4 mm. longus, cum dentibus ovatis, 2—3 mm. longis, extus ferrugineo-tomentosis, intus glabris; petala alba, obovata, 5—6 mm. longa, apice rotundata, intus ferrugineo-tomentosa, extus glabra, basi breviter unguiculata; stamina 20, ca. 3 mm. longa; styli 3—5, liberi, basi villosi, ovarium apice dense villosum. Fructus ignotus.

Yunnan: Mar-li-po, in saltu, alt. 1200 m., I. 21, 1940, C. W. Wang 86318 (Typus in HP.); ibidem, in silvis, XI. 9, 1947, K. M. Feng 13123.

VII PYRUS L.

P. armeniacaefolia Yü, sp. nov. Pl. XXVII, 2

Species affinis *P. xerophilae* Yü sed habitu pyramidalis foliis suborbicularibus vel late

ovatis, margine crenato-serratis; fructibus depresso-globosus recedit.

Arbor pyramidalis, 8—12-metralis; ramuli leviter angulares, purpureo-fusci, sparse lenticellati, glabri; gemmae oblongo-ovoideae, acuminatae, perulis extus margine villosis exceptis glabris. Folia late ovata vel suborbicularia, 4—5 cm. longa et lata, acuta vel obtusa, basi rotundata vel truncata, margine crenulato-serrata, supra saturate viridia, subtus pallidiora, glabra, nervis utrinsecus 8—10 arcuatis, in sicco utrinque leviter reticulatis; petioli 2—3 cm. longi, glabri. Pomum depresso-globosum, 2.5—3 cm. diam., flavo-viride, apicem versus attenuatum calyce persistente coronatum sepalis ovato-lanceolatis, intus dense lanatis, sparse punctatum, 5-loculatum; pedunculus gracilis, 2.5—3 cm. longus; semina obovoidea, 6 mm. longa et 4 mm. lata, castanea.

Sinkiang: Ta-cheng, cult. in pomariis, IX. 26, 1959, Sinkiang Exp. 29 (Typus in HP.).

P. calleryana Dcne. var. ***integrifolia*** Yü, var. nov.

A typo recedit foliis ovatis margine integris basi rotundatis.

Chekiang: Mei-ki, VIII. 9, 1924, W. C. Cheng 4936 (Typus in HP.); Mt. Tien-mu-shan, VIII. 15, 1927, T. Tang & W. Y. Hsia 468; Mt. Mo-kan-shan, VIII. 1929, T. N. Liou 6869.

P. hopeiensis Yü, sp. nov.

Species ex affinitate *P. ussuriensis* Maxim. et *P. phaeocarpae* Rehd. ab hac fructibus fuscis punctatis, ab illa foliis margine setoso-serrulatis, fructibus calyce persistente coronatus divergit. Verisimiliter *P. ussuriensis* × *P. phaeocarpa* est.

Arbor 6—8-metralis; ramuli teretes, leviter angulares, glabri, purpureo-fusci, sparse lenticellati, nonnumquam in spinas mutati; gemmae oblongo-ovoideae vel triangulari-ovoideae, acutiusculae, perulis exterioribus margine ciliatis exceptis glabris. Folia chartacea, ovata, late ovata vel suborbiculata, 4—7 cm. longa et 4—5 cm. lata, subito vel sensim acuminata, basi rotundata vel subcordata, margine setoso-serrulata, dentibus erecto-patentibus vel interdum accumbentibus, supra saturate luteo-viridia, subtus paulo pallidiora, glabra, nervis utrinsecus 8—10 arcuatis, utrinque in sicco leviter reticulata; petioli graciles, 2—4.5 cm. longi, initio leviter pilosi, mox glabrati. Inflorescentia corymbosa, 6—8-flora, pedicelli ut receptaculum laxe pilosi vel glabri, 1.2—1.5 cm. longi; sejala triangulari-ovata, margine glanduloso-serrata, extus laxe pilosa, intus dense lanata; petala oblongo-obovata, apice plerumque irregulariter erosa, basi breviter unguiculata, 8 cm. longa et 6 cm. lata, alba; stamina circiter 20, petalam dimidiam aequantia; styli 4, stamina subaequant, glabri. Pomum subglobosum vel globoso-ovoideum, 1.5—2.5 cm. diam., fuscum, apice versus attenuatum, calyce persistente erecto vel incurvo coronatum, punctatum, 4-rarissime 5-loculatum; semina obovoidea, 6 mm. longa et 4 mm. lata, castanea.

Hopei: Chang-li, Hing-shu-yuan, in itinere, matthiola piri, IX. 21, 1953, F. S. Chang 268 (Typus in HP.); ibidem, IX. 1953, F. S. Chang 238, 269, 276.

P. pseudopashia Yü, sp. nov.

Species affinis *P. pashiae* D. Don a qua foliis obtusis vel acutis, inflorescentiis sparse lanatis, floribus minoribus, fructibus calycibus persistentibus coronatis recedit.

Arbor 5—10-metralis; ramuli teretes, hornotini leviter flavo-lanati mox glabri, annotini purpureo-fusci, sparse lenticellati; gemmae ovoideae, fuscae, perulis ovatis acutis exterioribus margine ciliatis exceptis glabris. Folia chartacea, ovata vel ovato-oblonga,

rarius ovato-lanceolata, 6—8 cm. longa et 3.5—4.5 cm. lata, acuta vel obtusa, basi rotundata vel late cuneata, margine crenato-serrulata, supra initio glabra, subtus tomento araneoso-lanata leviter oblecta, cito glabrata, nervis utrinsecus 7—12 arcuatis, utrinque in sicco leviter reticulata; petioli graciles, initio lanati, rarius fere glabri, 1.5—3.5 cm. longi. Inflorescentia umbellato-racemosa, 5—7-flora, sparse flavo-lanata mox fere glabrata; pedicelli 2—3 cm. longi, ut receptaculum initio plus minusve lanati, mox omnino glabrati; sepala triangulari-ovata, acuta vel obtusa, sparse glanduloso-denticulata, receptaculum subaequantia, circiter 2 mm. longa, extus sparse intus dense lanata; petala late ovata, alba, 6—8 mm. longa, subito breviter unguiculata, leviter et irregulariter erosa; stamina circiter 25, corollam dimidiam subaequantia; styli glabri, 3—4. Pomum subglobosum, 1.5—2.5 cm. diam., basi rotundum impressum, apicem versus attenuatum, dentibus calycis persistentibus erectis vel incurvatis coronatum, punctatum, 3—4-loculare, pedunculo 3—4.5 cm. longo insidens; semina oblongo-obovoidea, leviter compressa, 5—6 mm. longa, castanea.

Yunnan: Lan-ping, alt. 2800 m., in fruticetis, IX. 26, 1933, H. T. Tsai 56143 (Typus in HP.); Hokin, Sung-kwei, in itinere, VIII. 19, 1914, R. C. Ching 23741; Weisi, alt. 3000 m., in silvis, VI. 1935, C. W. Wang 63727; ibidem, IX. 7, 1955, K. M. Feng 20923.

Kweichow: Payui, Tuh-shan, alt. 550 m., in silvis, VIII. 24, 1930, Y. Tsiang 6629.

***P. sinkiangensis* Yü, sp. nov.**

Species affinis *P. communis* L. a qua pedicellis longioribus, foliis argute serrulatis differt. Versimiliter *P. communis* × *P. bretschneideri* est.

Arbor 6—9-metralis; ramuli teretes, leviter angulares, glabri, purpureo-fusci vel griseo-fusci, sparse lenticellati; gemmae ovoideae, acutiusculae, perulis exterioribus margine ciliatis exceptis glabris. Folia chartacea, ovata, oblonga vel late ovata, 6—8 cm. longa et 3.5—5 cm. lata, subito acuminata, basi rotundata vel late cuneata, margine argute serrulata praeter basim vel tertiam partem inferiorem integra, initio laxe araneoso-lanata mox perfecte glabrata; petioli 3—5 cm. longi, initio albido-lanata, mox omnino glabri; stipulae membranaceae, lineari-lanceolatae, acuminatae, glanduloso-serratae, 8—10 mm. longae, albido-lanatae, caducae. Inflorescentia umbellato-racemosa, 4—7-flora, pedicelli ut receptaculum initio albido-lanati mox glaberrimi, 1.5—3 cm. longi; sepala triangulari-ovata, acuminata, glanduloso-denticulata, receptaculo fere duplo longiore, 6—7 mm. longa, extus fere glabra vel plus minusve tomentosa, intus dense fulvo-tomentosa; petala obovata, alba, 1.2—1.5 cm. longa, 0.8—1 cm. lata, apice plerumque irregulariter erosa, breve unguiculata; stamina 20, petalam dimidiam subaequantia; styli 5, basi pilosi, staminibus paulo breviores. Pomum ovoideum vel obovoideum, calyce persistente coronatum, 2.5—5 cm. diam., basi sensim in pedicellum 4—5 cm. longum contractum.

Sinkiang: Lun-tai, alt. 1060 m., cult. in pomariis, nomen vulgare "Amut", V. 1, 1959, Sinkiang Exp. 17 (Typus in HP.); Shan-shan, Lu-ke-sin, alt. 200 m. VI. 15, 1959, Sinkiang Exp. 27; ibidem, VI. 18, 1959, Sinkiang Exp. 46, 47.

Kansu: Ko-lan, cult. in pomariis, IV. 18, 1939, W. Y. Hsia 4911, 4822.

***P. xerophila* Yü, sp. nov.**

Species *P. serrulatae* Rehd. valde affinis, sed foliis multo minoribus, margine crenato-serrulatis, inflorescentiis laxe pilosis, fructibus minoribus, calyce persistente, 4—5-loculari-

bus differt.

Arbor 8—10-metralis; ramuli crassi, leviter flexuosi, initio sparse pilosi vel glabri, annotini fusco-grisei, sparse lenticellis parvis instructi; gemmae ovoideae, acutiusculae, perulis ovatis exterioribus margine ciliatis exceptis glabris. Folia chartacea, ovata vel oblongo-ovata, 4—7 cm. longa et 2.5—4 cm. lata, acuminata rarius acuta, basi rotundata, margine crenato-serrulata vel ad apicem sparse argute serrulata, supra saturate luteo-viridia, subtus pallidiora, utrinque glabra, nervis utrinsecus 5—10 arcuatis; petioli 2.5—5 cm. longi, glabri; stipulae membranacea, lineari-lanceolatae, acuminatae, glanduloso-denticulatae, 6—10 mm. longae, intus lanatae, fugaciae. Inflorescentia umbellato-racemosa, 3—6-flora; pedicelli graciles, 2—3 cm. longi, ut pedunculum sparse pilosi, mox glabrati; flores 2—2.5 cm. diam.; calyx glaber vel fere glaber, sepala triangulari-ovata, acuminata, sparse glanduloso-denticulata, receptaculo paulo longiora, extus glabra, intus lanata; petala late ovalia, alba, 9—10 mm. longa, subito breviter unguiculata, leviter erosa; stamina 20, petalis circiter triente breviora; styli 5 rarius 4, stamina subaequant, basi sparsissime pilosi. Pomum ovoideum vel ellipsoideum, 1—1.5 cm. diam., fuscum, pallide lenticellatum, apice calyce persistente erecto vel incurvo coronatum, 4—5-loculare, pedunculo 2—4 cm. longo.

Kansu: Yü-chung, Mt. Hing-lung-shan, in silvis, VII. 3, 1955, T. T. Yü 112 (Typus in HP.); Tien-shui, Pai-yang-lin, VIII. 1951, C. M. Liu 10242, 10516; ibidem, W. Y. Hsia 5295, 5316, 5453.

Shensi: Fo-ping, K. C. Fu 4683; Wu-kung, cult., IV. 8, 1955, T. T. Yü 14.

Shansi: Hsin-hsien, Niu-tsao-ko, V. 27, 1959, K. C. Kuan & Y. L. Chun 462.

VIII. CHAENOMELES Lindl.

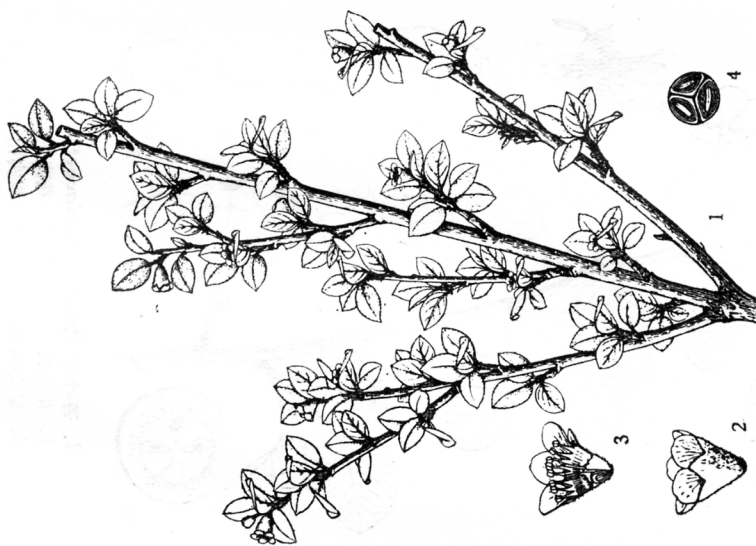
C. thibetica Yü, sp. nov.

Species affinis *C. lagenariae* (Loisel.) Koidz. a qua foliis integris, subtus dense ferrugineo-tomentosis, stylis basi villosis distinguitur. Verisimiliter *C. lagenaria* × *Docynia delavayi* est.

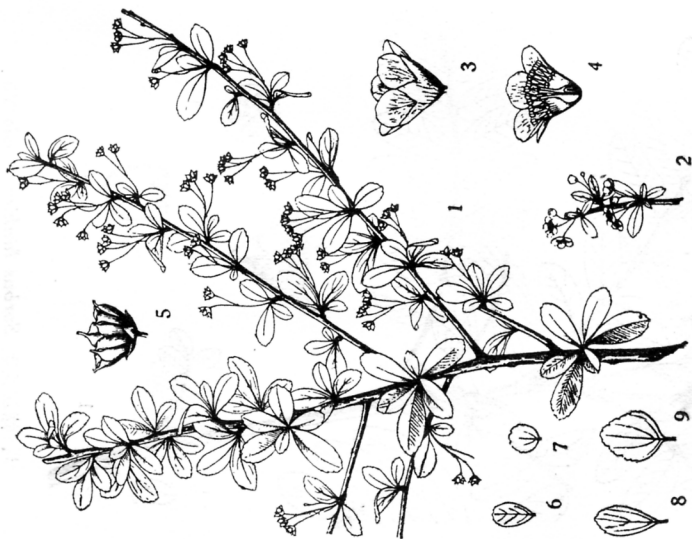
Frutex vel arbor parva, 1.5—3-metralis; ramuli robusti, tortuosi vel recti, nitidi, rubro-vel purpureo-fusci, vetustiores nigro-fusci, lenticellis numerosis oblongis albidis; spinae rectae, 1—1.5 cm. longae; gemmae triangulari-ovoidae, acutiusculae, rubro-brunneae, pauci-perulatae, perulis margine tenuiter ciliatis exceptis glabrae. Folia coriacea, ovato-vel oblongo-lanceolata, 6—8.5 cm. longa, 1.8—3.3 cm. lata, acuta, basi cuneata, margine apice excepto integra rarius pauci-serrulata, supra saturate viridia, nitidula, glabra, subtus dense ferrugineo-tomentosa, nervis utrinsecus 11—13 ut costa elevatis; petioli 1—1.6 cm. longi, initio ferrugineo-villosi, demum glabrati; stipulae foliaceae, cordato-falcatatae vel reniformes, circ. 1 cm. longae, 1.2 cm. latae, irregulariter glanduloso-serratae, supra glabrae, subtus tomentosae, deciduae. Flores ignoti. Fructus oblongus vel pyri-formis, 6—11 cm. longus, 5—9 cm. latus, odoratus, flavus; calyx persistens, lobis reflexis; styli 5, basi connati dense villosi; pericarpium crassum, succulentum; semina numerosa, compressa, triangulari-ovoidae, circ. 1 cm. longa, 0.6 cm. lata, obscure brunnea.

Tibet: Lah-sa, Lobu-linka, cult. in pomariis, alt. 3760 m., IX. 13, 1960, K. H. Fu 663 (Typus in HP.); Lin-chi, Tung-chiu, in valle, alt. 2660 m., X. 17, 1960, K. H. Fu 707.

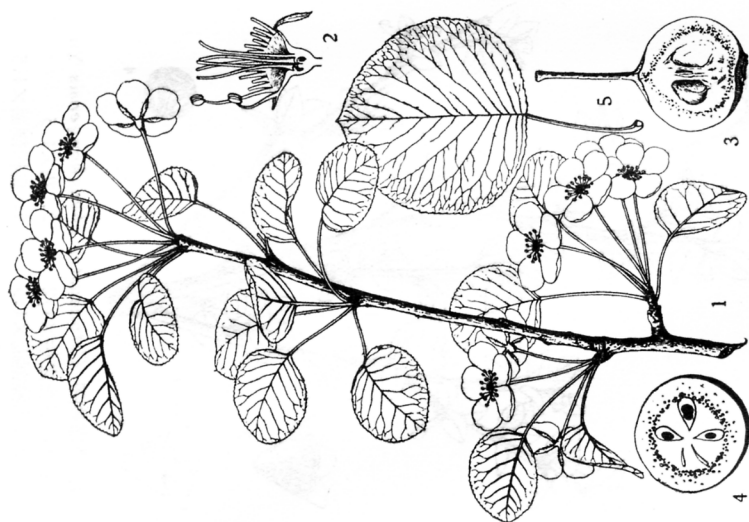
Szechuan: Hsaio-chin, Szepapurka, in declivibus saxosis, alt. 2650 m., VIII. 24, 1958, S. S. Chang & Y. S. Zen 6832.



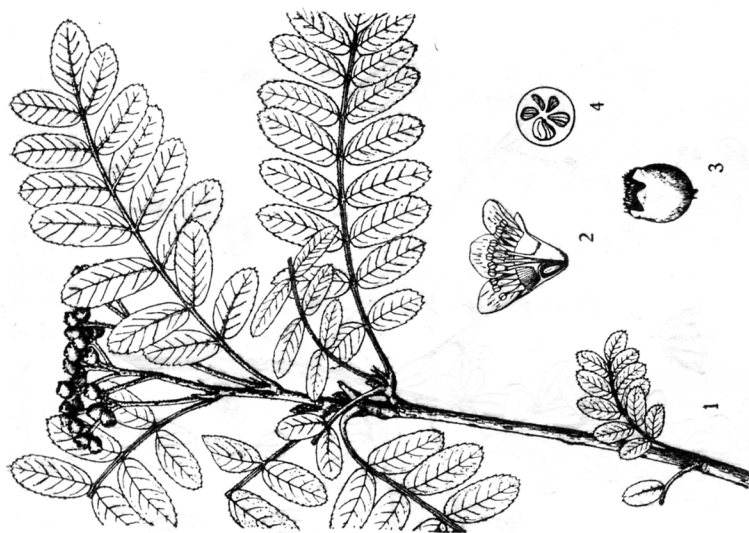
2. 鐘廣栒子 *Cotoneaster chengkangensis* Yü
1. 着花之枝×1/2 2. 花×1.5
3. 花縱剖面×1.5 4. 果橫剖面×1.5



1. 广西绣线菊 *Spiraea Kwangsiensis* Yü
1. 果枝×1/2 2. 花枝×1/2 3. 花×1.5
4. 花縱剖面×1.5 5. 果实×2.5 6—9 叶片×1/2



2. 杏叶梨 *Pyrus armeniacaefolia* Yü
1. 花枝 $\times 1/2$ 2. 花纵剖面 $\times 1.5$
3. 果实纵剖面 $\times 1/2$ 4. 果实横剖面 $\times 1/2$
5. 成熟叶片 $\times 1/2$



1. 倭江花楸 *Sorbus kiukiangensis* Yü
1. 着果的枝 2. 花纵剖面 $\times 2.5$
3. 果实 $\times 1.5$ 4. 果实横剖面 $\times 1.5$